

# Curriculum Vitae

11/20/2012

## Jiquan Chen, Ph.D.

Distinguished University Professor (DUP)

Department of Environmental Sciences (DES)

The University of Toledo, Toledo, Ohio 43606

Phone: (419) 530-2664, Fax: (419) 530-4421, Home: (419) 882-2912

E-mail: [jiquan.chen@utoledo.edu](mailto:jiquan.chen@utoledo.edu)

Website: <http://research.eescience.utoledo.edu/lees/index.html>

### EDUCATION:

Ph.D. (1991): Ecosystem Analysis, University of Washington, Seattle, Washington

M.S. (1986): Forest Ecology, Chinese Academy of Sciences, Beijing and Shenyang, P.R. China

B.S. (1983): Plant Ecology, Inner Mongolia University, Huhhot, P.R. China

### WORK EXPERIENCE:

- Distinguished University Professor, University of Toledo (2010 - Present)
- Professor, Landscape Ecology & Ecosystem Science (LEES), Department of Environmental Sciences, University of Toledo, Toledo, Ohio (2003 - Present)
- Adjunct Research Professor, Institute of Botany, Chinese Academy of Sciences, China (2004 - Present)
- Associate Professor, Landscape Ecology and Ecosystem Science (LEES), Department of Environmental Sciences, University of Toledo, Toledo, Ohio (2001 - 2003)
- Professor and Chair, Ecology Program, Fudan University, Shanghai, P.R. China (2004 - 2007)
- Bullard Fellow, Harvard University, Boston, Massachusetts (1999 - 2000)
- Associate Professor with tenure since 1998, Landscape Ecology and Ecosystem Science (LEES), School of Forestry and Wood Products, Michigan Technological University, Houghton, Michigan (1998 - 2001)
- Assistant Professor, Landscape Ecology and Ecosystem Science (LEES), School of Forestry and Wood Products, Michigan Technological University, Houghton, Michigan (1993 - 1998)
- Auxiliary Assistant Professor, College of Forest Resources, Univ of Washington, Seattle, WA (1993 - 2003)
- Adjunct Professor of Ecology, North Carolina State University, Raleigh, North Carolina (2004 - 2007)
- Adjunct Associate Professor, Beijing University, Beijing, P.R. China (1994 - 1998)
- Adjunct Ecologist, Institute of Applied Ecology, Chinese Academy of Sciences, Beijing, China (1994 - 1997)
- Post-Doctoral Research Associate, Olympic Natural Resources Center, University of Washington (1991 - 1993) and Center for Streamside Studies (1992 - 1993), Seattle, Washington

### AWARDS & RECOGNITIONS:

- Fellow, American Association for the Advancement of Science (AAAS). 2011
- Norbert Gerbier-MUMM Award for 2010 as a Co-Author, World Meteorological Organization, 2011
- Faculty Excellence Award (2010, 2011), College of Art and Sciences, University of Toledo
- Wangkuancheng Award, Chinese Academy of Sciences, 2011
- First Prize for "Achievement in Higher Education" - 2009, Shanghai City
- Excellence in Summer Graduate Lectures - 2008, Fudan University
- Outstanding Service Award - 2007, Chinese Association of Greater Toledo
- Outstanding Faculty Research Award - 2006, University of Toledo
- Research Fellowship for Foreign Specialists, 10/24 - 10/29/2004, FFPRI, Japan
- Sigma Xi/Dion D. Raftapoulos Award, 2004, University of Toledo
- Research Expert, Korean Forest Service - 2003
- Charlie C. Bullard Fellowship, 9/1/1999 - 8/30/2000, Harvard University, Massachusetts
- "Most influential in the development of my scientific career", 1999, Intel Science, Talent Search
- Second Place for the Graduate Student Seminar, 1990, University of Washington
- Outstanding Graduate Student for 1983 - 1987, Chinese Academy of Sciences

## PROFESSIONAL SERVICE:

- Editor-in-Chief, “*Ecosystem Science and Applications*” book series, HEP and De Gruyter (5/2011 -)
- Associate editor: *SciTechnol* (8/2012-)
- Coordinating Editor: *Landscape Ecology* (5/2011 - Present)
- Editorial Board: *Ecological Processes* (6/2011 - Present)
- Editorial Board: *Biosciences (BIOSCI)* (2/2010 - Present)
- Editorial board: *Review of Global Change Research* (1/2009 - 2010)
- President, Association of Chinese Faculty and Staff , University of Toledo (12/2008 - 2010)
- Editorial Board (member): *The Open Conservation Biology Journal* (10/2007 - Present)
- Associate/Handling Editor (ecology): *Journal of Integrative Plant Biology* (1/2007 - Present)
- President, Chinese Association of Greater Toledo (1/2006 – 2009, 2012 - present)
- Editorial Board (member): *Agricultural and Forest Meteorology* (10/13/2006 – 2009, 2012-Present)
- Chair, IUFRO Landscape Ecology Working Group (1/2005 - Present)
- Editorial Board: *Journal of Plant Ecology – UK* (12/2004 - Present)
- Chief Scientist, US-China Carbon Consortium (USCCC), (12/2003 - Present)
- Editorial Board: *Acta Ecologica Sinica* (1998 - Present) - Elsevier J.
- Editorial Board (member): *Forest Ecology and Management* (9/10/2007 - Present)
- Panel Member, Dr. K.C. Juan Scholarship (2009, 2010)
- Panel Member, Ecosystem Studies Cluster, NSF (10/2009, 10/2010, 2011)
- Editorial Board: *Frontiers of Forestry in China*, HEP - Springer Press (10/2005 – 12/2009)
- Editorial Board: *Acta Applied Ecologica* (1997 - 2005) (2005 - 2009)
- Special Issue Editor, *Journal of Integrative Plant Biology* (12/2007 – 7/2008): plant responses to climate change
- Member of the Governing Committee for the Great Lakes Environmental Observatory Networks (GLACEO of NEON) (10/2005 - 2/2008)
- Guest Editor, Special Issue on USCCC, *Agricultural and Forest Meteorology* (10/2006 -2/2008)
- Special Issue Editor, *Agricultural and Forest Meteorology* (7/2004 – 2/2007): Carbon studies in ChEAS
- Panel Member, NICCR/DOE Midwest Region (2006, 2007)
- Panel Member: NASA LULUC (2007), Fellowship (2011)
- Panel Member, EPA STAR/GRO Fellowships, Terrestrial Plant and Soils (2004, 2005, 2006)
- Panel Member, NASA IDS (2006)
- Panel Member, NASA LCLUC / USDA CSREES (2005)
- Panel Member, NASA NESSF
- Panel member, NSF/ES (2009F, 2010F, 2011S)
- Associate Editor, *Forest Science* (4/2001 - 3/2005)
- Special Issue Editor, *Forest Science* (2004 - 2005): Teakettle Ecosystem Studies
- Guest Editor: *Southeastern Naturalist* (5/2005 - 8/2005)
- Special Issue Editor, *Forest Science* 50(3) (2004): Forest Canopies
- Editorial Board Member, TAMU China Database, (2/2003 - 2004)
- AGU Session Organizer, Session GC019: Environmental, socio-economic and climatic change in Northern Eurasia and their feedbacks to the Global Earth System, 12/2012
- Panel Member, External Advisory Panel, P.R. China Database, Taxes A&M (5/2002 - 2/2003)
- Panel Member, Research Committee for Canadian Model Forests (1994 - 1998)

## MEMBERSHIPS:

- American Geophysical Union (AGU) (2005 - Present)
- American Association for the Advancement of Science (1/2010 - Present)
- National Association of State Universities and Land-Grant Colleges (NASULGC) (3/1999 - Present)
- Ecological Society of America (1987 - Present)
- International Canopy Network (ICAN) (1995 - Present)
- Xi Sigma Pi (1989 - Present)
- SINO-Ecologists Club (1988 - Present)
- Society for Conservation Biology (1996 – 12/2009)

- International Association for Landscape Ecology (1991 - 2005)
- Society of American Foresters (1993 - 2005)
- Northwest Sciences (1998 - 2002)

#### TEACHING (MTU and UT):

- EEES6980/MATH5780: Joint Seminar in Mathematical and Environmental/Biological Sciences (2012 S, 2012F 3-Cr)
- EEES6930/9030: Graduate Orientations (2007 - Present), UT
- EEES 4750: Conservation Biology (2002 - Present, 3 credits), UT
- EEES 5750: Advanced Conservation Biology (2002, 2004, 4 credits), UT
- EEES 6980-025: Current Issues in Eco- and Geo-Sciences (spring, 2002, 2 credits), UT
- EEES4760/6760: Landscape Ecology (spring, 2003, 2005, 4 credits), UT
- EEES6660/8660: Biophysical Processes of Ecosystems (fall, 2002, 3 credits), UT
- EEES 6960: Masters Thesis Research (2001 - Present, variable credits), UT
- EEES 8960: Doctoral Dissertation Research (2001 - Present, variable credits), UT
- Field Ecology Lectures for “Community & Ecosystem” Class, Ohio Wesleyan Univ., 2007, 2008 (UT)
- FW3020: Forest and Landscape Ecology (2000 - 2001, 3 credits), MTU
- FW5411: Analysis of Ecological Data II (2000 - 2001, 3 credits), MTU
- FW5430: Advanced Landscape Ecology (2000 - 2001, 3 credits), MTU
- FW5090: Biophysics and Ecosystem Processes (2000 - 2001, 3 credits), MTU
- FR443: Landscape Ecology, teaching assistant, University of Washington (1992, 4 credits), MTU
- FW210: Forest Ecology, Michigan Technological University (fall, 1993, 4 credits), MTU
- FW221: Applications in Forestry Sciences, (fall, 1994 - 1995, 2 credits), MTU
- FW414: Ecological Modeling, (1997 - 1998), MTU
- FW443: Landscape Ecology, (winter, 1994 - 1998, 3 credits), MTU
- FW543: Advanced Landscape Ecology, (winter, 1994 - 2001, 4 credits), MTU
- FW509: Forest Microclimate and Measurements, (spring, 1995 and 1997, 3 credits), MTU
- FW551A: Quantitative Methods for Spatial Data, (fall, 1993, 2 credits), MTU
- FW483: Integrated Forest Resource Management III, (1995 - 1996), MTU
- FW551A: Computational Techniques for Spatial Data in Ecology, (fall, 1994, 2 credits), MTU
- FW105: Introduction to Forestry and Wood Science (Guest lectures), (fall, 1994, 1995(2), 1998), MTU
- FW482: Integrated Forest Resource Management II (Guest lecture), (spring, 1995, 1996), MTU
- FW442: Wetland Ecology (Guest lecture), (spring, 1994, 1995, 1996, 1997), MTU
- FW500: Graduate Research in Forestry, MTU (1993 - Present), MTU
- FW600: Doctoral Research in Forestry, MTU (1994 - Present), MTU
- LA5515: Landscape Ecology and Design (Guest lecture), Harvard University

#### Graduate Students Advised, Their Thesis and Current Position

1. **Silbernagel, Janet.** 1996. Dialectical sequences between culture and landscape ecological approach. Ph.D. Thesis. Michigan Technological University. Currently Associate Professor at the University of Wisconsin, Wisconsin, with tenure.
2. **Brosofske, Kimberley Dawn.** 1996. Effects of harvesting on microclimate from small streams to uplands in western Washington. MS thesis, Michigan Technological University. Currently Research Associate Professor, Michigan Tech University.
3. **Saunders, Sari C.** 1998. Multiscale relationships between landscape structure and function in a managed forest. Ph.D. Thesis. Michigan Technological University. Currently Research Ecologist, Coast Forest Region, BC Ministry of Forests and Range, Canada
4. **Song, Bo.** 1998. Three-dimensional forest canopies and their spatial relationships to understory vegetation. Ph.D. Thesis. Michigan Technological Univ. Currently Associate Professor at Clemson Univ, SC, w/ Tenure.
5. **Rudnicki, Mark.** 1998. Relations of climate and radial increment of western hemlock (*Tsuga heterophylla*) in an old-growth Douglas-fir forest in southern Washington. MS thesis, Michigan Technological University. Currently an assistant professor at the University of Connecticut, tenure-track.
6. **Brosofske, Kimberley Dawn.** 1999. Relationships between understory vegetation and landscape structure across multiple spatial scales in northern Wisconsin. Ph.D. Thesis. Michigan Technological University.

7. **Wanggsenthorn, Surachit.** 1999. Genetic diversity in isolated bird populations following recent rain forest fragmentation. MS thesis, Michigan Technological University. Currently Ph.D. student at Michigan Technological University.
8. **Jaiteh, Malanding.** 2000. The dynamics of human-induced land cover changed in Miombo ecosystems of southern Africa. Ph.D. Thesis. Michigan Technological University. Currently Research Faculty at Columbia University, NY.
9. **Watkins, Radley.** 2000. Road effects on understory vascular plants in a managed forest landscape. M.S. Thesis, Michigan Technological University. Project manager for bear monitoring at the Glacier National Park, MT.
10. **Gerdes, Lynden B.** 2001. A contribution to the flora of the Rove slate bedrock complex landtype association, Northern Cook County, MN, USA. MS thesis, Michigan Technological University. Currently Ph.D. student at Michigan Technological University. Currently Botanist for Minnesota DNR (Co-Chair with M. Gale).
11. **Ma, Siyan.** 2003 (July). Interactions between microclimate, soil respiration, and disturbances in a forest ecosystem: Lessons from the Teakettle Experimental Forest. Ph.D. Thesis, University of Toledo, Currently a postdoctoral research associate in Univ. of California - Berkeley (Dennis Baldochii).
12. **Euskirchen, Eugenie S.** 2003 (Sep.). Carbon fluxes in managed forest landscapes: an empirical and model-based approach. Ph.D. Thesis, Michigan Technological University. Currently a research scientist at the University of Alaska (Dr. Dave Maguire).
13. **Bresee, Mary K.** 2004 (May). Photosynthetic characteristics of dominant tree species in two climatically different landscapes. M.S. Thesis, University of Toledo. Currently a Ecologist at USDA FS.
14. **Rademacher, John A.** 2004 (May). Forest structure and carbon allocation within and between two northern-mixed hardwood edges. M.S. Thesis, University of Toledo. Currently a Range Conservationist at the Humboldt-Lioyable National Forest, Nevada.
15. **Le Moine, James Michael.** 2004 (December). Soil respiration across chronosequences of three dominant forest ecosystems in Northern Wisconsin, USA. M.S. Thesis, University of Toledo. Currently a research assistant and lab manager at Department of Ecology & Evolutionary Biology, University of Michigan (with Knute Nadelhoffer).
16. **Ryu, Soung-Ryoul.** 2005. Effect of disturbances on fuel loading, fire spread, and interactions in managed forest landscapes. Ph.D. Thesis, University of Toledo, Currently an assistant professor at University of Alberta.
17. **Concilio, Amy L.** 2005. Interannual Variability in Soil Respiration and Response to Experimental Burning and Thinning in an Old Growth Mixed-Conifer Forest. M.S. Thesis, University of Toledo. Currently Ph.D. student at UCSC.
18. **LaCroix, Jacob Joseph.** 2006. Interactions Between Fire and Landscape Structure: Applications of the FARSITE Model. Ph.D. Thesis, University of Toledo, Currently a research fisheries biologist at NOAA.
19. **Li, Qinglin.** 2006. Carbon storage and fluxes in a managed oak forest landscape. Ph.D. Thesis, University of Toledo, Currently Research Scientist of Canadian Forest Service.
20. **Henderson, Rachel.** 2007. Soil Effluxes of vertical profiles at MOFEP Experiments. M.S. Thesis, University of Toledo. Currently RA at the Rocky Mountain Ecology Lab.
21. **Tenney, Gwendolyn H.** 2007. Quantifying the effects of prescribed burning on soil carbon efflux in an Ohio oak woodland. M.S. Thesis.
22. **Zhang, Wenli.** 2007. Carbon Fluxes of Typical Steppe and Cropland Ecosystems in the Agri-Pasture Transition Region of Inner Mongolia, P.R. China. Ph.D. Thesis, Institute of Botany, Chinese Academy of Sciences, Currently Associate Professor of the Three Gorges University, permanent.
23. **Shao, Changliang.** 2008. Energy Balance of Three Typical Communities along Temperature Gradients in Inner Mongolia Steppe. . Ph.D. Thesis, Institute of Botany, Chinese Academy of Sciences, Currently Assistant Professor at the IBCAS, permanent.
24. **Gong, Chongfeng.** 2009. The spatial-temporal characteristics of urban vegetation in Shenzhen. Ph.D. Thesis, Sun Yat-Sen University. Currently Assistant Professor of ...
25. **Lu, Nan.** 2009. Regional Climate Change and Vegetation–Water Relations in Inner Mongolia Lessons Learned within the NASA Project “Effects of Land Use Change on the Energy and Water Balance of the Semi-Arid Region of Inner Mongolia, China”. Ph.D. Currently an Assistant Prof at Chinese Academy of Sciences, permanent.
26. **Schaefer, Jessica N.** 2009. The Effects of Inter-Annual Climate Variability on Butterfly Communities in a Heterogeneous Landscape of the Oak Openings Region, Northwest Ohio. M.S. Thesis.
27. **Xu, Jianye.** 2009. Interannual Dynamics of Soil Respiration in Managed Oak Forests in Missouri Ozarks. M.S. Thesis. Currently a Ph.D. student at UT

28. **John, Ranjeet**. 2011. Effects of LCLUC on ecosystem functions in Semiarid Inner Mongolia. Ph.D., currently a post-doc at LEES Lab.
29. **Deal, Mike W**. 2011. Net primary production in three bioenergy crop systems following land conversion. M.S. Thesis. Currently a research Technician at LEC, UT.

Others:

1. **Marshall, Treneice**. 1999-2001. Contributions of wetland ecotones to the overall species diversity of a northern Wisconsin landscape. MS thesis, Michigan Technological University. Currently unknown.
2. **Xu, Ming**. 1994-1996. Microclimate and plant diversity in Missouri Ozarks. Ph.D. Transferred to UC Berkley. Associate Professor at Rutgers University.

## SERVICE ON UNIVERSITY COMMITTEES

- Graduate Committees:

- 1) Post-doctoral Research Associate Advisor

Mr. Mike Deal (6/2011 – Present), technician, UT  
 Dr. Ranjeet John (1/2011 – Present), UT  
 Dr. Terenzio Zenone (2/2009 - Present), UT  
 Dr. Burkhard Wilske (1/2007 – 4/2010), UT  
 Dr. Karrin Alstad (5/2007 – 8/2009), UT  
 Dr. Jared Deforest (6/2004 - 8/2006) , UT  
 Dr. Siyan Ma (8/2003 - 4/2004), UT  
 Dr. Asko Noormets (9/2001 - 11/2006 ), UT  
 Dr. Xiaoli Cheng (10/2005 - 6/2006), UT  
 Dr. Xinli Wang (4/1998 - 3/2000), MTU  
 Dr. Kim Brosofske (4/1999 - 8/2000), MTU  
 Dr. Sari Saunders (5/1998 - 8/2001), MTU  
 Dr. Daolan Zheng (5/1998 - 5/1999, 10/2002 - 4/2006), MTU and UT  
 Dr. Malanding Jaiteh (3/2000-8/2000), MTU

- 2) Current Ph.D. Students, Chair

Yahn-Jauh Su (5/2012 – present), UT  
 Zuotao, Ouyan (8/2011 - Present), UT  
 Jing Xie (9/2009 – 5/2012), Beijing Forestry University  
 JuanJun Han (9/2010 - Present), IBCAS  
 Housen Chu (8/2010 - Present), UT

- 3) Current M.S. Students, Chair

None

- 4) Doctoral Committee Members, exclusive of above

Jiangye Xu (8/2009 – 12/2011, transfered), UT  
 Chenlei Huang (8/10 – 12/11 ), Business, UT  
 Haiqiang Guo (8/2004 – 7/2010), Fudan University/UT  
 Nan Lu (8/2005 – 8/2009), UT  
 Ran Jing (8/2006 - 5/2007), UT  
 Wen Cao (9/2005 - 12/2006), Ph.D., NC State University  
 Iona Ilniczki (1/2004 - 8/2004), UT -- incomplete  
 Michael Benedict, Ph.D. (5/2002 – 8/2009), UT  
 Tim Walters, Ph.D. (3/2003 - 5/2004), UT  
 Yunjiang Gu (9/2004 - 2006), Fudan University (Co-Chair)  
 Wenli, Zhang (10/2004 - 2007), Institute of Botany, Chinese Academy of Sciences  
 Long Wei (10/2004 -2008), Institute of Botany, Chinese Academy of Sciences  
 Shao Changliang (9/2005 - 2008), Ph.D., Institute of Botany, Chinese Academy of Sciences

Haixia Miao (9/2005 - 2008), Ph.D., Institute of Botany, Chinese Academy of Sciences  
 Yafeng, Bao (8/2005 - 2007), Ph.D., Institute of Botany, Chinese Academy of Sciences  
 Guang Zhao, Ph.D. (9/1993 - 7/1994), MTU  
 Jingkun Zhang, Ph.D. (11/1995 -12/1995), Biology, MTU  
 Eric Heitzman (1/1995 - 8/1997), MTU  
 Quanfa Zhang (9/1995 - 5/1998), MTU  
 John Vucetich (1/1997 - 8/1999), MTU  
 Hilary Alexis Londo (6/1997 - 6/1999), incomplete, MTU  
 Alain Briot (4/1995 - 1997), incomplete, MTU  
 Conghe Song (9/1995 - 1997), incomplete, MTU  
 Charlie Goebel (1997 - 5/2001), MTU  
 Surachit, Wanggsenthorn (9/2000 -Present), MTU  
 Li Wu (9/2002 - 5/2003) - incomplete, UT  
 Treneice Marshall (6/1999 -2001) - incomplete, MTU  
 Steve Mather (5/2002 -4/2004) - incomplete

5) M.S. Committee Members, exclusive of above

Heather M. Thoman (2012 -)  
 Catherine Buchanan (11/2008 – 5/2010), UT  
 Gwen Tenney (5/2004 - 5/2007), UT  
 Rachel Henderson (8/2005 - 5/2007), UT  
 Stanislav Nikolov (8/2005 - 12/2005), Geography, UT  
 Xiaoshu Tang (1/2005 - 8/2005), UT, Incomplete  
 Jim Le Moines (9/2001- 12/2004), UT  
 Steve Mather (5/2004 - 9/2004), Incomplete  
 Anne Sterns (8/2003 - 12/2006), EEES, UT  
 Kris Barnswell (9/2003 - 8/2005), EEES, UT  
 Kaushik Mysorekar (9/2001 - 5/2004), EEES, UT  
 Evan Kane (6/2000 - 5/2001), SFWP, MTU  
 Mary Jenkins (3/1994 - 3/1996), SFWP, MTU  
 Xiaqing Huang (9/1993 - 5/1994), Humanity, MTU  
 Huayong, Zhang (8/1994), Beijing Normal University, P.R. China  
 Bradley A.Young (11/1994-12/1995), Biology, MTU  
 Christian Ovanic (2/1995 - 12/1995), SFWP, MTU  
 Leslie Anne Jagger (9/1996 - 10/1997), SFWP, MTU  
 Christopher Nicleson (9/1995 - 5/1997), SFWP, MTU  
 Melinda Mosser (9/1996 - 5/1998), SFWP, MTU  
 Bill Boelma (10/1995 - 7/2001), Biology, MTU

• Other Committee and Administrative Service (MTU and UT):

1) Committees to MTU and UT

Member, Search Committee for CNSM “Unix IT” Position, 2011/12  
 Member, Search Committee for DES “Global Change” Position, 2011/12  
 Member, Graduate Program Review Committee (2/2010 - Present)  
 Member, University Strategic Planning Committee (10/2009 – 3/12), Co-Chair for Topic 3, UT  
 Member, UT Self Study for Accreditation (9/3/2009 – 3/2012), UT  
 Chair, Association of Chinese Faculty and Staff at University of Toledo (12/2008 - Present)  
 Member, Advisory Committee for GBI of UT, (12/2008 - Present)  
 Member, Merit Evaluation Committee (9/2008 – 2011), DES, UT  
 Chair, Mentors Committee (9/2008 - 2011), DES, UT  
 Member, NIST Proposal for UT’s Science Facility (2008, 2009)  
 Member, Ohio Scholarship Program (summer, 2008)  
 Member, STEM2 - Liberal Arts Implementation Working Group (3/2007), UT  
 Member, Outstanding Research Reviewing Committee (spring, 2007, 2009), UT  
 Member, Toledo-Lucas Country China Task Force (3/2007 - ), Toledo, OH  
 Member, Steering Committee of the FLUXNET (3/2007 - Present), UT

University Faculty Senate (8/19/2006 - 8/18/2008), UT  
 Outstanding Research Award Committee, member (2007), UT  
 Sigma Xi Research Award Committee, member (2005, 2006, 2009), UT Chapter  
 UT's NEON Initiatives, Chair (8/2005 - Present)  
 UT Energy Strategy Task Force to Representative Marcy Kaptur (9/2004 - 2/2005)  
 Search Committee, Member, Watershed Ecologist (8/2004 - 3/2005)  
 Seminar Committee, Chair, EEES (1/2004 - Present)  
 Member, Strategic Planning Committee (RJY) (5/2003 - 5/2004), UT  
 Chair, Computer Committee, EEES (10/2002 - Present), EEES, UT  
 Member, Search Committee for database manager at LEC, (10/2002 - 05/2002), EEES, UT  
 Member, Search Committee for 2 plant ecologists (5/2002 - 3/2003), EEES, UT  
 Member, Search Committee for Geoscientist (10/2001 - 2/2002), EEES, UT  
 Member of the test group for the Vision Funds at MTU (6/2001)  
 MTU Multi-disciplinary Sigma Xi student Research Colloquium Judge (1994, 1997, 2001)  
 Scholarship Committee (1994- 8/2001), MTU  
 Assessment Committee (9/2000 - 8/2001), MTU  
 MTU Initiative for the Environment (1/1995), MTU  
 Member for MTU "Leadership Program" (spring, 1996)  
 Continuous Improvement of Academic Advising (8/1998 - 8/2001), MTU  
 Member for MTU "Leadership Program" (spring, 1996)

## 2) Other Committees

Representative of Ecological Society of America (ESA) to IUFRO – Strategic Planning Subcommittee (2011-2014)  
 Member, Scientific Committee, IUFRO Landscape Ecology Working Group International Conference - Bragança 2010 (11/2008 - 10/2010)  
 Member, Scientific Committee, International Conference on Forests and Water, Raleigh, North Carolina (1/2009 - 9/2009)  
 Board Member, The Chinese School-Toledo (10/2009 - 9/2012)  
 Member, Asian Services In Action (ASIA) Scholarship Committee (1/2009 – Present) Ohio  
 Judge, Northwest Ohio District Science Day (3/18/2006) Toledo, Ohio  
 Organization Committee member, the 2005 International Carbon Symposium, P.R. China (6-7/2004)  
 Symposium Organizer, EcoSummit, Beijing, P.R. China (5/2007)  
 Organization Committee member, the 2006 IUFRO Workshop, Italy, (9/23 - 9/26/2006)  
 Organization Committee member, the 2004 IUFRO Workshop, Japan, (10/2003 - 10/2004)  
 Organization Committee member, the 4th IALE-China meeting, Beijing (5/2003 - 12/2003)  
 Search Committee member for the Dean (9/2000 - 5/2001), SFWP, MTU  
 Assessment Plan for the SFWP Committee, Chair (spring, 1996)  
 Search Committee (Chair) for the System Administrator for SFWP (spring, 1996)  
 "Applied Ecology and Environmental Studies" program (1995)  
 Scholarship Committee (6/1995 - 7/2001), Chair  
 Curriculum committee (9/1993 - 1996), Chair in 1996  
 Computer Committee (9/1994 - 1996), Chair in 1996  
 Ford Forestry Management and Research Committee (9/1997 - Present)  
 Tenure and Promotion Committee (8/1998 - Present, Chair in 2000)  
 Initial Search Committee for Wildlife Ecology Position (1994)

- Other Service

- NASULGC:

- Sub-committee **Chair**, Global Climate Change White Paper (10/2001 - 2002)
    - Scientific Committee Member for the Regional Forest Responses to Environmental Change" A Traveling Workshop in Massachusetts, New Hampshire and New York, USA (7/2005 - 10/2006)
    - Session **Chair**, 2<sup>nd</sup> IUFRO Landscape Ecology Workshop (5/1996) Corvallis, Oregon
    - Session Chair, 3<sup>rd</sup> IUFRO Landscape Ecology Workshop (5/11/2002) St. Marie, California
    - Webmaster (<http://research.eeescience.utoledo.edu/lees/IUFRO/>) (5/2000 - Present)  
Ecological Society of America (ESA)

- International Relationship Committee, **Chair** (1996 - 1999)
- **Chair**, Asian Ecology Section (1995 - 1996)
- Student Award **Judge** (1993)
- **Member**, International Relationships Committee (1993 - 1996), Chinese Ecologists Overseas
- **President** (1993)
- **Board of Directorates** and editorial board for the News Letter (1990 - 1994), **Chair** Society for Conservation Biology (SCB)
- Faculty **advisor** for MTU Chapter (1997 - 1998)
- **Leader**, SCB Delegation to P.R. China (9/28 - 10/4/2000)

#### Reviewer For:

##### 1) Professional Journals

Academic Press (book)  
 Acta Ecologica Sinica: 10/14/2009  
 Acta Oecologia: 11/2/2004  
 Advances in Atmospheric Sciences: 1/23/2009  
 Agricultural and Forest Meteorology: 4/2000, 7/26/2000, 10/3/2001, 4/24/2002, 8/31/2007, 9/4/2007, 9/12/2007, 10/1/2007, 12/12/2007, 1/25/2008, 2/16/2009, 4/10/2009, 6/15/2009, 10/16/2009, 11/19/2009, 1/4/2010, 1/18/2010, 3/11/2010, 4/9/2010, 7/7/2010, 7/8/2010, 8/8/2010, 10/5/2010, 12/28/2010, 1/26/2011, 3/14/2011, 8/9/2011, 8/9/11, 8/9/2011, 11/2/11, 11/20/11, 1/19/12, 3/12/12, 4/12/2012, 5/24/2012, 7/8/2012, 9/25/12, 10/29/12,  
 American Midland Naturalist: 11/1995  
 Applied Vegetation Science: 12/10/2007  
 Achieves of Environmental Contamination Toxicology (AECT): 1/3/2010  
 Arctic, Antarctic, and Alpine Research: 10/25/2003  
 BioScience: 2/24/2003  
 Bulletin of the Torrey Botanical Club: 8/1994  
 Canadian Journal of Forestry Research: 7/1999, 7/20/2000, 8/21/2001, 1/22/2004, 5/20/2004, 1/23/2006, 12/12/2007, 3/2/12,  
 Conservation Biology: 5/1993, 11/1995, 4/1996, 9/1997, 7/10/2007  
 Conservation Ecology: 2/4/2003, 7/17/2003  
 Ecohydrology: 7/12/2010, 11/20/11,  
 Ecological Applications: 4/1994, 4/1997, 12/1998, 8/1999, 2/19/2001, 5/19/2003, 12/30/2004, 9/30/2005  
 Ecological Modelling: 1/30/2006, 1/31/2007  
 Ecological Research: 12/20/2004, 7/24/2006  
 Ecology/Ecological Monograph: 4/2000, 7/18/2007, 3/31/2008, 11/9/2011,  
 Ecoscience: 11/3/2000  
 Ecosystems: 8/15/2000, 8/18/2000, 9/18/2000, 9/22/2000, 9/2/2004, 4/13/2009, 8/24/2009  
 Environmental and Experimental Botany: 12/20/2006  
 Environmental Management: 11/26/2002, 8/18/2004  
 Environmental Pollution: 5/22/2001, 10/25/2001  
 Forest Ecology and Management: 9/1997, 2/21/2001, 6/14/2001, 8/23/2004, 11/2/2004, 12/22/2004, 2/28/2005, 8/19/2005, 9/26/2005, 12/21/2005, 3/21/2006, 3/29/2006, 7/25/2006, 8/29/2006, 5/3/2007, 7/11/2007, 7/13/2007, 8/31/2007, 9/1/2007, 10/15/2007, 1/22/2008, 1/23/2008, 1/28/2008, 2/15/2008, 9/8/2008, 9/10/2008, 1/23/09, 1/24/09, 3/21/09, 4/10/09, 6/12/2009 (4), 6/26/2009, 8/20/2009, 10/16/2009, 7/5/2010, 7/6/2010, 8/27/2010, 1/31/2011, 6/24/2011, 8/9/2011, 9/19/2011, 1/11/2012, 10/29/12,  
 Forest Science: 10/1994, 9/1998, 7/1999, 8/24/2001, 9/18/2001, 11/14/2001, 12/6/2001, 3/26/2002, 3/18/2002, 4/21/2002, 5/1/2002, 5/15/2002, 6/5/2002, 6/19/2002, 6/20/2002, 8/31/2002, 10/1/2002, 10/22/2002, 12/28/2002, 2/16/2003, 6/27/2003, 7/14/2003, 10/22/2003, 9/2/2004, 7/16/2007, 1/25/2009, 8/21/2009, 3/10/2010, 1/3/2011  
 Frontiers in Ecology and the Environment: 9/30/2005, 5/4/2007  
 Global Change Biology: 3/28/2006, 8/289/2006, 10/29/2006, 9/2/2007, 1/5/2009, 3/16/2011, 4/30/12,  
 Hort Technology: 1/2000  
 IUFRO-Chile Conference special issues: 7/16/12 (2)  
 Journal of American Society for Horticultural Science: 4/28/2005  
 Journal of Applied Ecology: 3/1996



Journal of Applied Meteorology: 12/4/2004  
 Journal of Arid Environments: 5/1999  
 Journal of the Arkansas Academy of Science: 7/8/2010  
 Journal of Biogeography: 7/9/2007  
 Journal of Ecology: 11/1998  
 Journal of Forestry: 1/23/2009  
 Journal of Forest Research: 10/11/2010  
 Journal Geophysical Research: 12/19/2007  
 Journal of Integrative Plant Biology: 4/30/2007, 10/21/2009  
 Journal of Plant Ecology: 11/19/2006  
 Journal of Soil and Water Conservation: 1/15, 5/13/2002  
 Journal of Tropical Forest Science: 10/1995  
 Journal of Vegetation Science: 1/1996, 2/1996, 12/30/2004  
 Journal of Wildlife Management: 11/1994  
 Landscape and Ecological Engineering: 11/20/11,  
 Landscape and Urban Planning: 1/24/2005, 12/20/2005, 2/3/2006, 5/12/2006, 10/8/2008, 11/2/2008, 4/6/2009,  
 6/10/2009  
 Landscape Ecology: 4/2000, 1/22/2001, 7/15/2002, 3/8/2003, 10/26/2003, 1/7/2004, 1/17/2005, 5/24/2005,  
 8/17/2009, 1/19/2010  
 Natural Areas Journal: 10/1996, 12/1996, 8/1998  
 Northern Journal of Applied Forestry: 10/14/2006  
 Open Conservation Biology Journal: 1/7/2010, 11/19/2011,  
 Northwest Science: 4/1992  
 Pedosphere: 6/23/2005  
 Plant Ecology: 8/2000, 8/28/2001  
 Remote Sensing of Environment: 6/7/2006, 7/30/2008  
 Restoration Ecology: 11/4/2000, 3/19/2009  
 Revista Chilena de Historia Natural, 3/25/2002  
 Tree Physiology: 2/4/2001, 5/18/2001, 12/13/2001, 9/11/2006  
 Soil Science Society of America Journal: 1/27/2011  
 Science of the Total Environment: 8/24/2007, 1/5/2010  
 Urban Forestry and Urban Greening: 10/11/2010, 1/18/2011, 9/18/12,  
 Water, Air, and Soil Pollution: 12/1994  
 Wetland Ecology and Management: 10/26/2009

## 2) Books and Book Chapters

Central Hardwood Forest Conference Proceedings (GTR): 1/9/2010  
 Conservation Biology (Van Dyke): 1/2/2007  
 Forest Landscape Ecology: Transferring knowledge to practice: 1/12/2005  
 Hemlock Conference Proceedings: 2/1996  
 Higher Education Press: A new “noural of Ecological Management” 1/31/2011  
 Scaling in ecology (Wu et al.): 5/19/2003  
 USDA FS General Technical Report (NC): 8/29/2002  
 Studying for Edge Effects (Book Chapter by Voller): 3/1996  
 Texas Agricultural Experiment Station proposal: 5/1996  
 Chapter by Knight et al. (Forest fragmentation in the S. Rocky Mountains): 3/1998  
 Learning Landscape Ecology, Springer-Verlag: 6/1999  
 Anonymous reviewer for 4 chapters of a text by McGraw Hill Companies: 9/2/2000  
 “Forest Ecology” (J.P. Kimmings), 3<sup>rd</sup> Edition, Prentice-Hall Inc. 11/3/2000  
 Springer, 03/29/2005, 2/8/2008 (C management)

## 3) Foundation Proposals:

Austrian Science Fund: 5/2010  
 American Association for the Advancement of Science (AAAS): 3/11/2002  
 Black Well Science (Conservation Biology): 6/6/2004  
 Czech Science Foundation: 10/24/12

Chinese Natural Science Foundation: 5 proposals on 5/11/2009, 5 proposals on 5/14/2011, 4 on 5/10/2012,  
 Clemson University Experimental Station: 1/2/2004,  
 Columbia University Press: 11/27/2002  
 Competence Center Environment and Sustainability (Europe CCES): 3/25/2007  
 Earthwatch proposal: 8/1998, 9/1998, 5/22/2001  
 Ecological Society of America symposium proposal (29): 11/1998  
 Ecological Stewardship Project: 3/1997  
 Elsevier Science: 8/22/2002  
 Florida Native Plant Society (FNPS): 3/22/2010  
 Foreign Agricultural Service (FAS) USDA: 9/1998  
 Prentice Hall: 8/18/2006 (Kareiva and Marvier proposal)  
 Fudan University: Chung Kong Scholarships 5/2/2005  
 Leopold Center for Sustainable Agriculture: 12/1/2009  
 Louisiana Board of Regents' Research Competitiveness Subprogram: 1/10/2010  
 Maryland Sea Grant: 5/15/2011  
 NASA EOS: 7/10/2003, 7/11/2003, 08/2008/2007(2), 9/30/2010/ 4/2011  
 National Institute for Global and Environmental Change (NIGEC):11/1998, 11/12/2001, 9/29/2002, 10/2/2002,  
 5/30/2003, 1/4/2007, 9/10/2007, 9/10/2008  
 National Science Foundation: 3/1996, 7/1997, 10/1998, 3/1999, 10/2000, 3/27/2001, 8/24/2001, 8/19/2001,  
 3/18/2002, 3/25/2002, 6/5/2002, 8/30/2002, 4/2/2003, 9/19/2005, 3/4/2007, 10/20/2008, 9/10/2009,  
 9/30/2010, 10/4/2010, 3/2011, 10/1/2012,  
 National Sciences and Engineering, Research Council of Canada: 8/11/2006  
 NOAA-SBIR: 3/23/2010, 3/24/2010  
 Sustainable Forest Management Network, Ca: 12/1998, 2/2000, 1/24/2001, 1/21/2002  
 Sustainable Michigan Endowed Project: 12/6/2004  
 University of Wisconsin - Madison, Hatch and MS Program: 10/27/2003  
 USDA NRICGP: 3/1996, 1/1997, 4/1998, 3/1999, 3/26/2001, 3/29/2001, 3/18/2002, 3/13/2002,  
 3/23/2002, 5/5/2005, 5/3/2007

4) Others:

Co-Convener ESA Session on “Understanding the Influence of Ecosystem Structure on Function: Honoring the  
 Enduring Impact of Dr. Jerry Franklin on Forest Ecology” (OOS-24), The 97<sup>th</sup> Annual ESA meeting,  
 Portland OR, 8/8/2012,  
 Chair/Organizer, LCLUC/NASA workshop in drylands – Kaifeng, 2011  
 Chair and Organizer, International Conference on Forest Landscape and Management, Chengdu, P.R. China:  
 9/15-22/2008  
 Workshop organizer (WSHP 14), Annual Meeting of the ESA, Montreal, Quebec, Canada: 8/6-11/2005  
 Session Chair (140) at the ESA Annual Meeting, Montreal, Quebec, Canada: 8/6-11/2005  
 Review for Glob. Chang. Position, Fudan University, 5/2011  
 Review for the USDA FS Working Unit (NE-4153): 3/2003  
 Review for the Tenure and Promotion, University of New Hampshire: 11/3/2011  
 Review for the Tenure and Promotion, Binghamton University: 12/2005  
 Review for the Tenure and Promotion, Ohio University: 4/2007  
 Review for the Tenure and Promotion, University of Nevada: 8/2008  
 Review for USDA Forest Service Personal Promotions: 1999, 2002, 2006, 2007, 2008  
 Ecology Committee Member of NASULGC (National Association for State Universities and Land-Grant  
 Colleges): 3/1999 – Present  
 Planning Committee member for "Sustainable Forests -- Integrating the Experience", an International  
 Conference on Implementing Ecosystem Management, Sault Ste. Marie, California: 1995  
 Delegation member to Northeastern Forestry University, P.R. China (8/1994  
 Session Chair for IUFRO Landscape Ecology Workshop (Perspective from Other Institutional and Geographic  
 Sectors”, 10/2/1996, Corvallis, Oregon  
 FFC Management Plan, 1995 - 8/2001, MTU  
 Session Chair for IUFRO Landscape Ecology Workshop, Corvallis, October 2-4, 1996  
 ESA symposium organizer, Providence, RI, August, 1996

Research Committee for “Prince Alberta Model Forest”, Canada: 1994 - 1996  
Bylaw Revision Committee for SINO-ECO Club: 1996  
North Central Technical Committee on Riparian Buffer Zone Management: 1994 – 2001  
Planning Committee member for “Sustainable Forests – Integrating the Experience”, an International Conference on Implementing Ecosystem Management, Sault Ste. Marie, California  
Member of Ecology Sub-Committee for National Scientific and Educational Development, P.R. China: 1995  
ESA symposium organizer: 1993, 1995, 2002  
Program Committee Member for ESA Annual Meeting: 1996, 1998

#### **Other activities:**

12/28/2009: Assisted a high school student (Nicholas Labardee) on his science project on biomass and energy.  
3/20/2010: Judge for the “2010 Midwest Graduate Research Symposium” - University of Toledo.

#### **PUBLICATIONS** (\*publication of a graduate student thesis. **Total SCI >4419, h-index=32**)

##### **BOOKS**

1. **Chen J.**, et al. *In Progress*. Biophysical Models and Applications in Ecosystem Analysis. HEP and De Gruyter (book proposal approved).
2. **Chen., J.**, S. Wan, G. Henebry, J. Qi, G. Gutman, G. Sun, and M. Kappas (eds.) *in press*. Dryland East Asia (DEA): Land Dynamics Amid Social And Climate Change. HEP and De Gruyter.
3. **Chen, J.**, S. Yang (eds.) *in press*. 2012. Methods for Terrestrial Ecosystem Studies. The Higher Education Press (submitted on April 26, 2012).
4. Li, C. Laforzezza, and **J. Chen** (eds.) 2010. Contribution of Landscape Ecology to Forest Management and Conservation. HEP and Springer, 424pp.
5. Laforzezza, R. **J. Chen**, G. Sanesi, and T. R. Crow (eds.) 2008. Patterns and Processes in Forest Landscapes. Springer-Verlag. 425pp.
6. **Chen., J.**, S. Liu, R. Lucas, P. Sun, R. Laforzezza, and L. Delp (eds.) 2008. Landscape ecology and forest management: challenges and solutions. The Proceedings of the International Conference of IUFRO8.01.02. Chengdu, P.R. China. 192pp.
7. Gu, B., J. Wu., Y., Wu, Q. Dong, and **J. Chen** (eds.) 2008. Green Career - poem and essay collection written by Chinese Ecologists overseas. Higher Education Press, 171pp.
8. **Chen, J.** S.C. Saunders, K.D. Brosofske, and T.R. Crow (eds.) 2006. Ecology of Hierarchical Landscapes: from Theory to Application. Nova Science Publisher. 311pp.
9. **Chen, J.**, B. Li, Z. Ma, and B. Zhao (eds.) 2005. Challenges Facing Ecologists: Questions and Approaches, The Higher Education Press, Beijing, P.R. China. 244pp.
10. Dong, Q. and **J. Chen**. 2002. Nature’s Giving. Fujiang Education Press, Fuzhou, P.R. China. 192pp.

##### **EDITED SPECIAL ISSUES**

1. Xiao, J., **J. Chen**, K. J. Davis, and M. Reichstein. 2011. Advances in Upscaling of Eddy Covariance Measurements of Carbon and Water Fluxes *Journal of Geophysical Research – Biogeosciences*.
2. **Chen, J.**, H. Gao and R. Waring. 2011. Plant and Water Relations. *Journal of Plant Ecology* 4 (1-2).
3. Heckathorn, S. and **J. Chen**. 2008. Plant responses to climate change. *Journal of Integrative Plant Biology* 50(11).
4. **Chen, J.**, K.J. Davis, and T.P. Meyers. 2008. Ecosystem-atmosphere carbon and water cycling in the temperate northern forests of the Great Lakes Region. *Agricultural and Forest Meteorology* 148(2).
5. North, M. and **J. Chen**. 2005. Sierran mixed-conifer research *Forest Science* 51(3).
6. Parker, G. and **J. Chen**. 2004. Canopy research. *Forest Science* 50(3).

##### **JOURNAL ARTICLES** (Citations at <http://www.researcherid.com/rid/D-1955-2009>)

###### **Submitted (x)**

Xia, J, W. Yuan, S. Liang, **J. Chen**, L, Li, X. Li, L. Zhang, Y. Fu, T. Zhao, J. Feng, Z. Ma, M. Ma, S. Liu, G. Zhou, J. Asanuma, S. Chen, M. Du, G. Davaa, T. Kato, Q. Liu, S. Liu, S. Li, C. Shao, Y, Tang, X. Zhao.  
Satellite-Based Analysis of Evapotranspiration and Water Balance of Dryland East Asia. *Remote Sensing of Environment* (in review)

- Wang, C, Y. Han, **J. Chen**, X. Wang, Q. Zhang, and B. Bond-Lamberty. Effects of snowpack and freeze-thaw-cycle on the seasonality of soil CO<sub>2</sub> efflux in a temperate forest. *Agricultural and Forest meteorology* (submitted)
- Yan, X., W. Bao, X. Pang, N. Zhang, and **J. Chen**. Regeneration strategy influences ground bryophyte composition and diversity after forest clearcuts. *Annals of Forest Science*. (revision submitted on 11/9/12)
- Tian, L., **J. Chen**, and S. Yu. Has Shenzhen been heated up during the rapid urban build-up process? *Landscape and Urban Planning* (submitted on 10/26/12)
- Zenona, T., I. Gelfand, **J. Chen**, S. K. Hamilton, and G. P. Robertson. Carbon balances during land conversion in early bioenergy systems. *Agricultural and Forest meteorology* (submitted 10/24/12)
- de Paul Obade, V. R. Lal, and **J. Chen**. Remote sensing of soil and water quality in agroecosystems. *Critical Review in Plant Sciences Journal* (submitted on 10/13/12)
- Wang, J., D. G. Brown, and **J. Chen**. Dynamics of net primary productivity in the Mongolian grasslands (1982–2009) in relation to climate variability and change. *Landscape Ecology* (submitted 10/13/2012)
- Wang, J., D. G. Brown, and **J. Chen**. Drivers of the dynamics in net primary productivity across agro-ecological zones on the Mongolian Plateau. *Landscape Ecology* (submitted 10/13/2012)
- Wang, YL, Q Zhuang, M. Chen, Z. Pan, N. Tchebakova, A. Sokolov, D. Kicklighter, J. Melillo, A. Sirin, G. Zhou, Y. He, **J. Chen**, L. Bowling. Evapotranspiration response to changing climate and vegetation on the Mongolian Plateau during the 21st Century. *Global and Planetary Change* (submitted on 9/17/2012)
- Ouyan, Z., R. Becker, W. Shaver, and **J. Chen**. Evaluating the Sensitivity of Wetlands to Climate Change with Remote Sensing Techniques, Hydrological Processes (submitted on 8/31/2012).
- Shao, C., **J. Chen**, L. Li. Disturbances and Extreme Climate Alter the Biophysical Regulations of Carbon Fluxes in a Desert-Steppe Ecosystem. *New Phytologists* (submitted on 7/25/12)
- Shao, C., **J. Chen**, L. Li, G. Tenney; W. Xu, J. Xu. Role of net radiation on energy balance closure in grassland ecosystems. *PLoS ONE* (submitted on 6/25/12)
- Olson, D., T. Griffis, A. Noormets, R. Kolka, and **J. Chen**. Interannual, Seasonal, and Retrospective Analysis of the Methane and Carbon Dioxide Budgets of a Temperate Peatland. *Journal of Geophysical Research – Biogeosciences* (revision submitted on 10/2012)
- Niu, N., R. Luo, Y. Luo, **J. Chen**, J. Olejnik, I. A. Janssens, G. Wohlfahrt, G. Kiely, A. Noorman., L. Montagnani, A. Cescatti, E. Magliulo, B. E. Law, M. Lund, A. Varlagin, A. Raschi, M. Peichl, M. B. Nilsson, L. Merbold. Spatial and temporal variability of apparent temperature sensitivity of terrestrial ecosystem respiration. *Journal of Geophysical Research – Biogeoscience* (submitted on 5/17/2012)
- Li, X, S. Liang, G. Yu, W. Yuan, X. Cheng, J. Xia, T. Zhao, J. Feng, Z. Ma, S. Liu, J. Chen, C. Shao, S. Li, X. Zhang, Z. Zhang, S. Chen, T. Ohta, A. Varlagin, A. Miyata, K. Takagi, N. Saiqusa, T. Kato, C. Rebmann. Estimation of gross primary production over the terrestrial ecosystems in China. *Ecological Modelling* (submitted on 4/26/2012)
- Zhou, J., Z. Zhang, A. Noormets, G. Sun, X. Fang, T. Zha, S. McNulty, and **J. Chen**. Response of ecosystem carbon fluxes to drought events in a poplar plantation in Northern China. *Forest Ecology and Management* (submitted on 3/31/2012)
- Gower, S. T., S. D. Peckham, A. R. Desai, T. A. Black, J. H. McCaughey, H. A. Margolis, A. Dunn, S. Wharton, K. T. Paw U, M.L. Goulden, B. Bond-Lamberty, A. G. Barr, F. Magnani, and **J. Chen**. North American old-growth forests are not carbon sinks. *Nature* (submitted on 3/2012)
- Groenendijk, M., A. J. Dolman, **J. Chen**, D. Gianelle, M. Herbst, G. Kiely, K. Klumpp, B. Köstner, L. Montagnani, E. Moors, O. Roupsard, and G. Wohlfahrt. Definitions of ecosystem water use efficiency evaluated with Fluxnet eddy covariance data. *Water Resources Research* (submitted on 3/18/2)
- Zhang, Z. Zhang, G. Sun, X. Fang, T. Zha., A. Noormets, **J. Chen**, S. McNulty, C. Liu, and L. Chen. Water balances of a poplar plantation forest in suburban Beijing, China. *Forest Ecology and Management* (submitted on 10/7/2011)
- Deal\*, M. W., J. Xu, R. John, T. Zenone, **J. Chen**, H. Chu, P. Jasrotia, K. Kahmark, J. Bossenbroek, and C. Mayer. Net primary production in three bioenergy crop systems following land conversion. *Biomass and Bioenergy* (submitted 9/9/2011).
- Zhu, X, Q. Zhuang, H. He, **J. Chen**, B. E. Law, D. Dragoni, S. B Verma, A. E. Suyker, L. Song. Modeling maximum light use efficiency and gross primary production using MODIS and AmeriFlux data. *Remote Sensing of Environment* (submitted 7/19/2011).
- Gong\*, C., **J. Chen**, and S. Yu. Biotic Homogenization or Differentiation in an Urban Landscape -- A Case Study on the Urban Green Spaces of Shenzhen, China. *Landscape and Urban Planning* (submitted 7/6/2011, in revision).
- Zhang, F, R. John, G. Zhou, J. Xu, C. Shao, **J. Chen**. Predicting structural properties of semiarid vegetation based on field spectrometry in Inner Mongolia. *Remote Sensing of Environment* (submitted 1/22/2011).

- Guo, H, Z. Ouyang, X. Xie, B. Zhao, **J. Chen**, B. Li, C. Fang, J. Chen. Invasive *Spartina alterniflora* impacts carbon cycling of an estuarine wetland. *New Phytologist* (submitted 1/18/2011).
- Zhou, J., Z.Q., Zhang, X.R. Fang, T.G. Zha, Y. Zhang, X.P. Wang, J.Q. Qi, **J. Chen**, G. Sun. Soil moisture affects ecosystem carbon and water fluxes of a poplar plantation. *Journal of Plant Ecology* (submitted 10/29/2010).
- Lu\*, N., B. Wilske, J. Ni, R John, **J. Chen**. Temporal and spatial variability of climate extremes in Inner Mongolia from 1955 to 2005. *International Journal of Climatology* (submitted 6/27/2009).

#### In Press (11)

- Chu, H.S., S.C. Chang, O. Klemm, C.W. Lai, Y.Z. Lin, C.C. Wu, J.Y. Lin, J.Y. Jiang, **J. Chen**, J. F. Gottgens and Y.J. Hsia. Does canopy wetness matter? Evapotranspiration from a subtropical montane cloud forest in Taiwan. *Hydrological Process*
- Asbjornsen, H., V. Hernandez-Santana, M. Liebman, J. Bayala, **J. Chen**, M. Helmers, C.K. Ong, and L. Schultze-Moore. Targeting perennial vegetation in agricultural landscapes for enhancing ecosystem services. *Renewable Agriculture and Food Systems* (revision submitted on 10/19/2011)
- Li, X, S. Liang. G. Yu. W. Yuan. X. Cheng. J. Xia. T. Zhao. J. Feng. Z. Ma, S. Liu, **J. Chen**. C. Shao. S. Li, X. Zhang, Z, Zhang, S, Chen, T, Ohta, A. Varlagin, A. Miyata, K. Takagi, N. Saiqusa, T. Kato, C. Rebmann. Estimation of Evapotranspiration 1 over the Terrestrial Ecosystems in China. *Ecohydrology*. (accepted, submitted on 4/26/12)
- Chen, J.**, R. John, Ge Sun, S. McNulty, A. Noormets, J. Xiao, M. G. Turner, J. F. Franklin. Carbon fluxes and storages in forests and landscapes. In Azevedo et al. Forest landscapes and global change: challenges for research and management. Springer. (submitted on 7/26/2012)
- Chen, J.**, R. John, G. Qiao, O. Batkhishig, W. Yuan, Y. Zhang, C. Shao, Z. Ouyan, L. Li, K. Guo, and G. Sun. State and change of Dryland East Asia (DEA). In Chen et al. (eds). Dryland East Asia (DEA): Land Dynamics Amid Social and Climate Change. HEP & De Gruyter Publishers (submitted on 3/2012)
- Shao, C., S. Chen, **J. Chen**, and L.Li. Biophysical regulations of ecosystem carbon and water fluxes in DEA. In Chen et al. Dryland East Asia (Dea): Land Dynamics Amid Social and Climate Change. HEP and De Gruyter.
- Sun, G. X. Feng, J. Xiao, A. Shiklomanov, S. Wang, Z. Zhang, N.Lu, S. Wang, B. Fu, R. Becker, and **J. Chen**. Global Change and Water Resources in the Drylands of East Asia. In Chen et al. Dryland East Asia (Dea): Land Dynamics Amid Social and Climate Change. HEP and De Gruyter.
- Gao, L., Y. Zhang, G. Qiao, and **J. Chen**. Grassland Degradation and Restoration in Inner Mongolia from 1950s to 2000s: Population, Policies, and Profits. In Chen et al. Dryland East Asia (Dea): Land Dynamics Amid Social and Climate Change. HEP and De Gruyter.
- Xiao, J., L. Zhang, **J. Chen**, R. John. Dynamics of Vegetation Productivity in Dryland East Asia from 1982 to 2010. In Chen et al. Dryland East Asia (Dea): Land Dynamics Amid Social and Climate Change. HEP and De Gruyter.
- Chen, J.** R. John, G. Qiao, O. Batkhishig, W. Yuan, Y. Zhang, C. Shao, Z. Ouyan, L.Li, K. Guo, and G. Sun. State and Change of Dryland East Asia (DEA). In Chen et al. Dryland East Asia (Dea): Land Dynamics Amid Social and Climate Change. HEP and De Gruyter.
- John\*, R., **J. Chen**, A. Noormets, X. Xiao, J. Xu, N. Lu, S. Chen. Modeling gross primary production in semi-arid Inner Mongolia using MODIS imagery and eddy covariance data. *International Journal of Remote sensing*. (submitted 8/19/2011).
- Fang, X., Z. Zhang, T. Zha, J. Tan, X. Wang, J. Chen, **J. Chen**, G. Sun Ge. Ecosystem and soil respiration of a poplar plantation on a sandy floodplain in Northern China. *Ecological Sinica* (submitted in Sept. 2011)

#### 2012 (15)

- Zheng, D., J.J. LaCroix, S. Ryu, **J. Chen**, J. Hom, and K. Clark. 2012. Fire spread regulated by weather, landscape structure, and management in Wisconsin hardwoods and New Jersey Pinelands. . In Qu, J. J., W. Sommers, R. Yang, A. Riebau, and M. Kafatos. (Eds.), Remote Sensing Modeling and Applications to Wildland Fires. Springer and Tsinghua University Press. Springer and Tsinghua University Press. 550 pp.
- LaCroix\*, J.J. Q. Li, S. Ryu, D. Zheng, and **J. Chen**. 2012. Edge effects on fuel loading and fire spread in a managed northern Wisconsin landscape. In Qu, J. J., W. Sommers, R. Yang, A. Riebau, and M. Kafatos. (Eds.), Remote

Sensing Modeling and Applications to Wildland Fires. Springer and Tsinghua University Press. Springer and Tsinghua University Press. 550 pp.

- LaCroix\*, J.J. Q. Li, S. Ryu, D. Zheng, and **J. Chen**. Edge effects on fuel loading and fire spread in a managed northern Wisconsin landscape. In xxx (eds.) In Kafatos and Qu, Introduction to Earth Science Satellite Remote Sensing, Earth Science Satellite Remote Sensing, Springer and Tsinghua University Press.
- Zhu, L., H. Li, **J. Chen**, R. John, and M Yan. 2012. Emergy-based sustainability assessment of Inner Mongolia. *Journal of Geographical Sciences* 22: 843-868.
- Zhang, F., J. Chen, **J. Chen**, C. M. Gough, D. Dragoni, and T. Martin. 2012. Evaluating spatial and temporal patterns of MODIS GPP over the conterminous US against flux measurements and a process model. *Remote Sensing of Environment* 124: 717-729. (submitted 9/2011).
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#### 1998 (3)

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- Saunders\*, S.C., **J. Chen**, T.R. Crow, and K.D. Brosfokske. 1998. Hierarchical relationships between landscape structure and temperature in a managed forest landscape. *Landscape Ecology* 13: 381-395.
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### 1997 (9)

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- Xu\*, M., S.D. Saunders, and **J. Chen**. 1997. Analysis of structure within the southeastern Missouri Ozarks. USDA Forest Service *General Technical Report* Nc-193: 41-53.
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### 1996 (3)

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- Chen, J.**, J.F. Franklin, and J.S. Lowe. 1996. Comparison of abiotic and structurally defined patch patterns in a hypothetical forest landscape. *Conservation Biology* 10(3): 854-862.
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### 1995 (2)

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### 1994 (1)

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### 1993 (2)

- Chen, J.**, J.F. Franklin, and T.A. Spies. 1993. An empirical model for predicting diurnal air-temperature gradients from clearcut-forest edge into old-growth Douglas-fir forest. *Ecological Modelling* 67: 179-198.
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### 1992 (1)

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### 1990 (1)

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### 1986 (1)

**Chen, J.** and S.D. Zhao. 1986. An Introduction to the Earth System Science. *J. of Terrestrial Ecology*, July, 53.

### OTHER PUBLICATIONS

- Chen, J.** 2012. Book Review on “Historical Environmental Variation in Conservation and Natural resource Management” (J.A. Wiens et al., eds.). *Choice*, . (Submitted on 10/26/2012)
- Chen, J.** 2012. Book Review on “Biodiversity and Ecosystem Insecurity” (A. Djoghla and F. Dodds, eds.). *Choice*, 3. (Submitted on 1/16/2011)
- Chen, J.** 2012. Book Review on “Climate change, ecology and systematics” (Hodkinson et al.). *Choice* 1. (Submitted on 9/19/2011)
- Chen, J.** 2011. Hypothesis as the focus in ecological research. *SinoEco Newsletter* 1: 3-5 (submitted on xxx)
- Chen, J.** 2011. Are flux towers becoming advanced weather stations? *FLUXNET Newsletter* 4(2): 10-12 (submitted on 9/19/2011)
- Chen, J.**, K. Czajkowski, R. Becker, and J. Gottgens. 2011. Responses of west Lake Erie Basin to climate change. Research and Activity Report, *Winous Point Marsh Conservation* 53-55.
- Chen, J.** 2011. Book Review on “Ecosystem Functioning”(by Kurt Jax). *Choice*, 5.
- Chen, J.** 2011. Book Review on “Resolving Ecosystem Complexity”(by Oswald J. Schmitz). *Choice*, 2.
- Chen, J.** 2010. Book Review on “Carbon sequestration in forest ecosystems”(by Klaus Lorenz and Rattan Lal). *Choice*, 8.
- Chen, J.**, Y. Luo, and Q. Ye. 2009. Constructing multifunctional diverse forest in China. *Science & Technology* 27(5): 10.
- Chen, J.** 2009. Book review on “Systemic management sustainable human interactions with ecosystems and the biosphere” (by C. W. Fowler). *Choice*, 8.
- Chen, J.** 2009. Book review on “Biometeorology for adaptation to climate variability and change” (by Ebi et al.). *Choice*, 8: 3/2009.
- Chen, J.** 2009. Book review on “Forest Ecosystems” (by D Perry et al.). *Choice*: 1/1/2009.
- Chen, J.** 2008. Book review on “Lessons from forest decentralization: money, justice and the quest for good governance in Asia-Pacific”. (C.J. Pierce et al.). *Choice*, 12.
- Chen, J.** 2008. Book review on “Ecological Restoration” (Clewel and Aronson). *Choice*, July.
- Chen, J.** 2008. Book review on “Key topics in landscape ecology” (Wu & Hobb), *Choice*, January.
- Chen, J.** 2007. Book review on “Principles and methods in landscape ecology” (Farina), *Choice*, April
- Chen, J.** 2006. Book review on “Complexity in Landscape Ecology” (Green et al.), *Choice*, October.
- Chen, J.** 2006. Book review on “Edible forest Gardens” (Chelsea and Green), *Choice*, January.
- LaCroix\*, J.J., D. Zheng, S. Ryu, Q. Li, **J. Chen**. 2005. The effect of patch edge on the direction and rate of fire spread in Wisconsin with comparisons to a New Jersey landscape. Proceedings of the EastFire Conference 2005, May 11-13, Fairfax, VA.
- Zheng, D., J.J. LaCroix, S. Ryu, **J. Chen**, J. Hom. 2005. Comparison of fire spread related to weather, landscape structure, management alternatives, and fuel loading in two landscapes: Northern Wisconsin and New Jersey pinelands, USA. Proceedings of the EastFire Conference 2005, May 11-13, Fairfax, VA.
- Ryu\*, S., **J. Chen**, D. Zheng, M.K. Bresee, and T.R. Crow. 2005. Simulating the effects of disturbances and age structure on fuel loading in forest ecosystems of northern Wisconsin, USA. Proceedings of the EastFire Conference 2005, May 11-13, Fairfax, VA.
- Clark, K. L., N. Skowronski, J. Hom, G. Starr, R. Bracho, and **J. Chen**. 2005. Development and application of a stand level fuel moisture index based on measurements of forest energy balance. Proceedings of the EastFire Conference 2005, May 11-13, Fairfax, VA.
- Chen, J.** 2005. Searching for the lost army of Cambyses and Sino-Eco Newsletter 18(1): 10-14.
- Chen, J.** 2005. Book review on “The everglades handbook: understanding the ecosystem” (T.E. Lodge), *Choice*, 3.
- Chen, J.** 2004. Advanced Ecology Lectures at Fudan University: July 9 - August 4, 2004. Sino-Eco News Letter.
- Chen, J.** 2004. Book review on “Landscape Agroecology”. *Choice*, 7.

- Chen, J.** 2002. A pleasant trip to the 87<sup>th</sup> Annual ESA meeting in Tucson, Arizona. *Sino-Eco Newsletter* 9(2): 13-15.
- Chen, J.** 2002. Book review on “The Plant Life of China”, *Choice*, 10.
- Chen, J.** 2002. Book review on “Vegetation and the terrestrial carbon cycle: modeling of the first 400 million years (Beerling and Woodward). *Choice*, 6.
- Chen, J.** 2001. The Three Gorges Dam project: Report from SCB’s Delegation to China. *Society for Conservation Biology Newsletter*. 5: 6.
- Euskirchen\*, E.S., R. Watkins, and **J. Chen**. 2000. Effects of Roads and Edges in a Fragmented Landscape in Northern Wisconsin, USA. *Proceedings of the 4<sup>th</sup> Chinese Ecological Society*. April, 25, Hanzhou, P.R. China.
- Chen, J.**, S. Bridgham, J. Pastor, J. Weltzin, X.Wang, C. Harth, B. Dewey, J. Keller, and K. Updegraff. 2000. Energy Flows in Peatlands and Temperature Responses to Heat and Water Loading: a Mesocosm Approach. The 11<sup>th</sup> Annual Harvard Forest Ecology Symposium, April 3, 2000, Harvard University, Petersham, Massachusetts.
- Chen, J.** 1999. Book Review on “Discovered Alive: the Story of the Chinese Redwood” (William Gittlen). *Choice*: 36(11/12).
- Chen, J.** and L. Gerdes. 1999. Book Review on “Landscape Plants for Subtropical Climates”. *Choice*, 36(9).
- Chen, J.** 1999. Book Review on “Sustainability of Temperate Forests”. *Choice*, 36(7).
- Chen, J.** 1998. Book Review on “Temperate Agroforestry Systems”. *Choice*, 35(1).
- Chen, J.** 1998. Book Review on “Placing Nature: Culture and Landscape Ecology”. *Choice*, 35(8): 4482.
- Chen, J.** 1997. Book Review on “Ecosystem Management: Applications for Sustainable Forest and Wildlife Resources”. *Choice* 34.
- Chen, J.** 1997. Book Review on “Forestry for Human Development: a Global Imperative”. *Choice*, 34, May.
- Chen, J.** and S. Saunders. 1996. Book Review on “Land Mosaics: the Ecology of Landscapes and Regions”. *Choice*, 33: 11/12:1824.
- Chen, J.** 1996. Book Review on “Natural Management of Woods - Continuous Cover Forestry”. *Choice*, 3: 1161.
- Chen, J.** 1995. Book Review on "Forest Ecosystems". *Choice*, 3: October, 319-320.
- Chen, J.** 1984. Thoughts on Ecosystem Equilibriums. *Graduate Newsletter, Academia Sinica*, Vol. 4.

*Note: The authors with a \* are/were graduate students under my supervision.*

#### **Other Technical Training:**

- 1992: Three courses on basic, intermediate, and advanced C & C<sup>++</sup> programming, Computer Center, University of Washington, Seattle, Washington
- 1998: SPlus workshop, Albuquerque, New Mexico
- 1999: ArcView Training course, Houghton, Michigan

#### **Public Service:**

- 1) News Media on J. Chen’s Research (examples in 1997)
  - [Research shows converting land for biofuel crops increases carbon debt](#), *UT News*, Sept. 26, 2011
  - Carbon Sequestration, Science direct, <http://www.sciencedaily.com/releases/2011/04/110414131851.htm>
  - Interview with two groups of ENGL 2950: Sci and Tech Writing), 2/15/2010
  - Chen’s Advanced Ecology Lectures in Fudan University, *Science* 319: 151, 2008
  - UT project aims to create 1st online arboretum in U.S., *The Blade*, Toledo, Ohio (<http://www.toledoblade.com/apps/pbcs.dll/article?AID=2003106160114>), 6/16/2003
  - The News, Toledo, Ohio Channel 11, <http://www.wtol.com/Global/story.asp?S=1324305>, 6/17/2003, *Ashland Daily*, 2002
  - “NW Forest Undergoing Carbon Dioxide Study”, *Timber Processing Magazine*, November 1998
    - “High above the Trees to Study a Douglas-fir Forest”, *The Forest Resource*, June, 1997
      - Also on the “Public Broadcast Station” in June, 1997
    - “Scientists Study Effect of Global Warming on Wetlands”, *Tech Topics*, September, 12, 1997
    - “Tech Scientists Study Effects of Global Warming”, *Mining Gazette*, September, 10, 1997
      - Also on the “Public Broadcast Station” on September 5, 1997
    - “Tech Researcher Will Monitor Key U.S. Forest”, *The Daily Globe*, February, 1997
    - “Tech Researchers Are Involved in Landscape Management”, *Michigan Tech Lode*, October 31, 1997
    - “Researchers Study Dynamics of Forest Landscape Management”, *Tech Topics*, November 14, 1997
    - “Tech to Participate in Study of Wetlands”, *Manistee News*, September 4, 1997
    - “Michigan Tech Students Will Study Global Warming”, *Petoskey News Review*, September 4, 1997
    - “Michigan Tech to Study Global Warming, Wetlands”, *Ann Arbor News*, September 4, 1997

- “Michigan Tech Join Wetlands Study”, *The Herald-Palladium*, September 4, 1997
- “Michigan Tech to Study Wetlands”, *Evening News*, September 4, 1997
- “Tech Researchers Study Wetland Ecosystems”, *The Daily Globe*, September 9, 1997
- “MTU Researchers Studying Effects of Timber Harvesting”, *The Daily Globe*, Ironwood, November 21, 1997
- “MTU, USFS Study the Landscape”, *L’ANSE Sentinel*, November 19, 1997
- “Studying Wetlands, Global Warming”, *L’Anse Sentinel*, November 19, 1997

## 2) Earthwatch Team in NE China and Washington State

- In the summers of 1996 and 1997, I voluntarily organized Field Expeditions for Earthwatch. I supervised 14 people who volunteered for the program. The volunteers were from Australia, Ireland, United Kingdom, New Zealand, Hong Kong, and the US.
- During the summer of 1997, I spent two weeks helping eight high school students experience canopy research in the Douglas-fir forest of Southern Washington.

## 3) Delegation Leader to China, Society for Conservation Biology, 9/2000

### Presentations:

#### 1) **Invited Seminar Series**

- **Chen, J.** Ecosystem Carbon & Water Fluxes in a Changing Climate and Society: What Have We learned in Ecosystem Studies. Environmental Research Center, West Virginia University, 9/13/2012
- **Chen, J.** Landscapes, people, and ecosystem services in a changing world. IUFRO7.01.08 Hydrology Conference, Kahramanmaraş Turkey, 9/3-6, 2012 (keynote address)
- **Chen, J.** What have we learned from recent FLUXNET synthesis on ecosystem carbon water, and energy balance? Redbud forum on global change Biology, Tsinghua University. 6/29/2012.
- **Chen, J.** Coupled Changes of Ecosystem, Environment and Societies: Lessons from Recent FLUXNET. *Institute of Applied Ecology, Shanghai Academy of Environmental Sciences*, 6/4/2012
- **Chen, J.** Eddy-Covariance Method and Net Ecosystem Exchanges of Trace Gases. *Institute of Applied Ecology, Shanghai Academy of Environmental Sciences*, 6/4/2012.
- Sun, G. X. Feng, J. Xiao, A. Shiklomanov, S. Wang, **J. Chen**. Climate change, land management, and water resources in the Drylands East Asia. The 97<sup>th</sup> Annual ESA meeting, Portland OR, 8/5-8/10, 2012
- **Chen, J.** Coupled changes in climate, ecosystems, and societies. Dept of Chemistry, UT, 1/18/2012
- Zenone T, Gelfand I, Chen J, Hamilton S.K. Robertson G.P Carbon balance during land conversion in early bioenergy systems 20<sup>th</sup> European Biomass Conference and Exhibition 18 - 22 June 2012. Milan - Italy
- **Chen, J.** What have we learned in ecosystem science? Dept. of Environ. Sci., University of Toledo, 9/16/2011.
- **Chen, J.** Applications of statistical methods in ecological research. Dept. of Mathematics, University of Toledo, 4/11/2011.
- **Chen, J.** Interactive Changes of Ecosystems and Societies on the Mongolian Plateau. Conservation Ecology Seminar Series. School of Natural resources, University of Michigan, 4/9/2011.
- **Chen, J.** Radio presentation on “Environment” at the WJR Station, Detroit, Michigan, 12/21/2010.
- **Chen, J.** Methods on quantifying ecosystem fluxes. International Symposium on Forest CO<sub>2</sub> Flux, Sitou, Taiwan, 12/6/2010.
- **Chen, J.** Evolution of tower-based flux measurements in ecosystem studies. International Symposium on Forest CO<sub>2</sub> Flux, Sitou, Taiwan, 12/6/2010.
- **Chen, J.** Net exchange of carbon, water, and energy using EC methods: what have we learned for ecosystem studies? International Symposium on Forest CO<sub>2</sub> Flux, Sitou, Taiwan, 12/6/2010.
- **Chen, J.** Landscape Ecology: An introduction. National Taiwan Normal University. 12/3/2010.
- Zenone T, Gelfand I, **Chen J**, Hamilton S.K. Robertson G.P Carbon balance during land conversion in early

bioenergy systems 20<sup>th</sup> European Biomass Conference and Exhibition 18 - 22 June 2012. Milan - Italy

- **Chen, J.** Applications of statistical methods in ecological research. Dept. of Math and Statistics, Bowling Green State University, 3/26/2010.
- **Chen, J.,** Ranjeet John, Nan Lu, Burkhard Wilske, Changliang Shao, Linhao Li, Lin Zhen, Shiqiang Wan, and others. Changes of Ecosystem & Societies on the Mongolia Plateau: Coupled Regulations of Landuse and Changing Climate. The 2009 Annual AGU Meeting. 12/17/2009.
- **Chen, J.** Interdisciplinary Science in changing climate, National University of Taiwan, 12/11/2009.
- **Chen, J.** Challenges in ecological education. National Tsungtsin University, Taiwan, 12/9/2009.
- **Chen, J.** Carbon storage and fluxes in managed forest ecosystems and landscapes. Adademia Sinica, Taiwan, 12/7/2009.
- **Chen, J.** Interdisciplinary Science is Real, not a Bluff. Institute of Applied Ecology, CAS. 7/15/2009.
- **Chen, J.** et al. CO<sub>2</sub> and H<sub>2</sub>O fluxes and multi-resource use at the scale-up plots of the GLBRC. The Great Lakes Regional Biogeochemistry Symposium, Kellogg Biological Station, 5/28-5/29, 2009.
- **Chen, J.** Biogeographic Landscapes of China - Ecology, Culture, Economics, and People. International Conference on Landscape Ecology and Forest Management, Chengdu, P.R. China, September 16-22, 2008.
- **Chen, J.** Global climate Change and ecosystem responses. The Graduate University of the Chinese Academy of Sciences. June 16-20, 2008 (five lectures).
- **Chen, J.** Developing Research Proposals. In “Applying for Fellowships and Grants: Tips from the Pros”. The 23<sup>rd</sup> IALE Annual Meeting. Madison, Wisconsin, April 5, 2008.
- **Chen, J.** Keeping carbon in the terrestrial ecosystems to battle global warming. Invited panelist for the “National Conversation on Climate Actions”. City of Toledo, Ohio, October 4, 2007.
- **Chen, J.** Science of Landscapes. The Graduate University of CAS, Beijing, P.R. China. June 20, 2007.
- **Chen, J.** Linking ecology to landscapes. Wuhan Botanical Garden, CAS, June 6, 2007.
- **Chen, J.** Ecology of multiple forest ecosystems in time and space. IUFRO 8 Landscape Ecology Conference, Bari, Italy. September 26-29, 2006 (Keynote Address).
- **Chen, J.** Water and carbon fluxes of Inner Mongolia. Inner Mongolia Academy of Forestry. August 3, 2006.
- **Chen, J.** Ecology of landscapes and region. Sichuan Academy of Forestry. August 15, 2006.
- **Chen, J.** Ecosystem Level Gas Exchange Measurement Techniques. 2006 Annual Meeting of the Society for Horticultural Science, New Orleans, Louisiana, July 29, 2006.
- **Chen, J.** Water and energy fluxes are tightly related to landuse in dominant ecosystems, of the semiarid region of Inner Mongolia. International Conference on Forest and Water in a Changing Environment. Beijing, P.R. China, August 8-10, 2006 (Keynote).
- **Chen, J.** Nature’s Wonders. The Saturday Science Lectures. June 3, 2006.
- **Chen, J.** Carbon fluxes and USCCC. Meteorological Bureau of China, Beijing, July 15, 2005.
- **Chen, J.** Carbon fluxes of disturbed landscape in a changing climate. Institute of Atmospheric Physics, Chinese Academy of Sciences, July 14, 2005.
- **Chen, J.** Forest Carbon Sequestration in Managed Ecosystems. School of Forestry and Environmental Sciences, North Carolina State University, March 14, 2005.
- **Chen, J.,** S. Saunders, K. Brososke, T. Crow. Linking Ecology to Landscape Hierarchies. The 4<sup>th</sup> IUFRO8.03 Landscape Ecology Workshop, 10/24-29, 2004, Tsuguba, Japan (Keynote Speaker).
- **Chen, J.** Climate change, land use, and NEEc of managed landscape. Rutgers University, New Brunswick. October 7, 2004.
- **Chen, J.** The coupled effects of land use and climate change on carbon flux in a forest landscape. Graduate

Seminar Series, Dept. of Forestry and Natural Resource, Purdue University, September 28, 2004.

- **Chen, J.** Ecology and Management of Landscapes. Wuhan Botanical Garden, Chinese Academy of Science, July 22, 2004.
- **Chen, J.** Carbon fluxes in fragmented landscapes. Clusters of Interdisciplinary Research on International Themes (CIRIT) Seminar Series, Ohio State University, May 26, 2004.
- **Chen, J.** Ecology and management of forested landscapes. Ohio University, Athens, Ohio. March 4, 2004.
- **Chen, J.** Ecology & management of landscapes. Inner Mongolia Agricultural University, Huhehot, P.R. China. December 19, 2003.
- **Chen, J.** Carbon fluxes of disturbed landscapes. Institute of Applied Ecology, Chinese Academy of Science, Shengyang, P.R. China, December 29, 2003.
- **Chen, J.** Culture, People, and Nature of South Korea and China. Asian Forum, University of Toledo, Ohio, October 3, 2003.
- **Chen, J.** Cumulative carbon flux in disturbed land Mosaics. Beijing Forestry University, Beijing, P.R. China, September 24, 2003.
- **Chen, J.** Educational challenges for the ecological community in the 21<sup>st</sup> century. Shanghai, P.R. China, September 7, (p.m.), 2003.
- **Chen, J.** Cumulative carbon flux in disturbed land Mosaics. Fudan University, Shanghai, P.R. China, September 7 (a.m.), 2003.
- **Chen, J.** Fires, management, and ecosystem processes. Korean Forest Service, Seoul, S. Korea, September 2, 2003.
- Noormets, A., **J. Chen**, et al. Carbon fluxes of five ecosystems. Chequamegon Ecosystem-Atmosphere Study (ChEAS) 2003 Meeting, Kemp Natural Resources Station, Woodruff, Wisconsin, June 29 - July 2, 2003.
- **Chen, J.**, K. Brosofske, A. Noormets, et al. Carbon flux in disturbed land mosaics. Chequamegon Ecosystem-Atmosphere Study (ChEAS) 2003 Meeting, Kemp Natural Resources Station, Woodruff, Wisconsin, June 29 - July 2, 2003.
- **Chen, J.** Linking Ecosystem processes to landscape structure. Ecolunch Seminar Series, Department of Biology, Bowling Green State University, Bowling Green, Ohio, February 25, 2003.
- **Chen, J.** Linking Ecosystem processes to landscape structure. Weekly Monster Seminar JAMs, Co-Sponsored by the NOAA/NMFS and the University of Washington (<http://www.nwfsc.noaa.gov/seminars/>). Seattle, Washington, February 20, 2003.
- **Chen, J.** Edge effects in disturbed land mosaics. SPEA Seminar Series, Indiana University, Bloomington, Indiana, January 30, 2003.
- **Chen, J.** Fragmentation, edge effects, and carbon credits in disturbed landscapes. College of Life and Environmental Sciences, Nanjing University, Nanjing, P.R. China. September 11, 2002.
- **Chen, J.** Landscape fragmentation and edge effects. International Academic Conferences on the Optimum Allocation of Water Resources and the Sustainable Development in Arid Zone. Huhhot, Inner Mongolia, P.R. China (oral presentation). September 9, 2002.
- **Chen, J.** Challenges for the Ecological Community in the 21<sup>st</sup> Century. College of Life Science. Inner Mongolia University, Hohuhot, P.R. China, September 7, 2002.
- **Chen, J.** Edge effects and fragmentation in US Forests. The 87<sup>th</sup> Annual Meeting of ESA Symposium, Tucson, AZ, August 5, 2002.
- **Chen, J.** Carbon studies and higher education. National Science Foundation at Woodruff, Wisconsin. August 17, 2002.
- **Chen, J.** Variability and complexity in ecosystem science and landscape ecology. Michigan State University, East Lansing, Michigan. January, 2001.

- **Chen, J.** *Global warming has potentials to cause cooler soils.* Ecosystem Science Seminar Series, Marine Biology Lab, Woods Hole, Massachusetts. February, 2000.
- **Chen, J.** *Coherent spatial relationships between species distribution and production in an old-growth Douglas-fir forest.* Harvard Forest Seminar, Petersham, Massachusetts, January, 2000.
- **Chen, J.** *Conflicts between ecological dogmas and hierarchical theories.* Harvard Forest Seminar Series, Harvard University. October, 1999.
- **Chen, J.** *Ecological implications of microclimate associated with buffered riparian zones.* Symposium Speaker at 86<sup>th</sup> ESA Annual Meeting. Albuquerque, New Mexico, August, 1998.
- **Chen, J.** *Biocomplexity of ecosystems and their processes.* The Natural Resources Research Lab (NREL), Ft. Collins, Colorado, April, 2000.
- **Chen, J.** *Hierarchical changes of vegetation and microclimate across Ozark landscape.* School of Natural Resources, the University of Missouri, March, 1998.
- **Chen, J.** *Forest edges and edge effects: from stands to landscape.* Invited Speaker for a Seminar at the University of Nebraska - Lincoln, February, 1992.
- **Chen, J.** *The role of woody plants in agro-ecosystems.* Invited Lecture for the Department of Forestry, Fishery, and Wildlife, the University of Nebraska - Lincoln, February, 1992.

## 2) Volunteered

- Ouyang, Z-T., R. Becker, W. Shaver, **J. Chen**, Evaluating the sensitivity of wetlands to climate change with remote sensing techniques, Poster session presented at: Eco Summit 2012, 2012 September 30 - October 5, Columbus, Ohio, USA
- Terenzio, Z.
- **Chen, J.** Coupling humans and nature at regional scales. The 97<sup>th</sup> Annual ESA meeting, Portland OR, 8/5-8/10, 2012 (Oral)
- Bronson, D..., **J. Chen**. Forest canopy temperature: A comparison between an isotopic approach, and photosynthesis-weighted air temperature. The 97<sup>th</sup> Annual ESA meeting, Portland OR, 8/5-8/10, 2012.
- Gelfand, I., T. Zenone, P. Jasrotia, **J. Chen**, S. K. Hamilton, G. P. Robertson. Carbon balance of converting conservation reserve program (CRP) grasslands to agriculture. The 97<sup>th</sup> Annual ESA meeting, Portland OR, 8/5-8/10, 2012
- **J. Chen**. What Have We Learned from Recent FLUXNET Syntheses on NEE of Carbon, Water, and Energy? The 9<sup>th</sup> Annual USCCC Meeting, Changsha, Hunan, 6/16/2012.
- Goetz, S., K. DeBeurs, **J. Chen**, D. Brown, and J. Wang. Modeling Strategies for Adaptation (in the context of climate). NASA LULCC Annual Meeting, Rockville, Maryland, 04/03-04/05/2012 (oral).
- Qi, J., **J. Chen**, D. Ojima, F. Du, G. Han, M. Wang, X. Pan, X. Xin. Experiences and Challenges for Climate Adaptation in the Grassland Dominated Inner Mongolia Autonomous Region, China. NASA LULCC Annual Meeting, Rockville, Maryland, 04/03/2012-04/05/2012. (poster)
- **Chen, J.**, R. John, et al. Climate change, landuse, and ecosystems on Mongolia Plateau. NASA LULCC Annual Meeting, Rockville, Maryland, 04/03/2012-04/05/2012. (poster)
- Ozdogan, M., D. Brown, and **J. Chen**. Land Use Change, Hydrology and Climate in Central Asia NASA LULCC Annual Meeting, Rockville, Maryland, 04/03/2012-04/05/2012. (oral)
- **Chen, J.** and R. Jensen. Carbon stories from MOFEP: gains, losses, and stocks of alternative management. Missouri Natural Resources Conference, 2/1-2/3/2012, Tan-Tar-A Resort, MO
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- Le Moine, J.M.\* , S. Mather, **J. Chen** And M.K. Bresee, 59 Detecting changes in composition of a forested landscape mosaic with remotely sensed and management data. The 87<sup>th</sup> ESA Annual Meeting, Tucson, Arizona, August 4-10, 2002.
- Euskirchen, E.S.\* , **J. Chen** and K.S. Pregitzer. Carbon fluxes at a naturally regenerated Jack pine stand in northern Michigan. The 87<sup>th</sup> ESA Annual Meeting, Tucson, AZ, 8/4-10/2002. The 87<sup>th</sup> ESA Annual Meeting, Tucson, Arizona, August 4-10, 2002.
- **Chen, J.**, and others. 2001. Biodiversity and alternative landscape management. Annual Meeting of the Society for Conservation Biology, Hilo, Hawaii.
- Creed, J., **J. Chen**, and Others. The Three-Gorge Dam. Annual Meeting of the Society for Conservation Biology, Hilo, Hawaii.
- Bridgham, S. D., J. Pastor, J. Weltzin, **J. Chen**, B. Dewey, and J. Keller. 2001. Climate effects of carbon storage in peatlands. Annual meeting of Soil Science Society of America, Charlotte, North Carolina, October 21-25.
- Bridgham, S., J. Keller, J. Weltzin, J. Pastor, K. Updegraff, B. Dewey, C. Harth, and **J. Chen**. 2001. The carbon balance of bogs and fens in a manipulative climate change experiment. Seventh International Symposium on the Biogeochemistry of Wetlands, Duke University, Durham, North Carolina, June 17-20.
- Pastor, J., B. Peckham, S. Bridgham, J. Weltzin, and **J. Chen**. 2001. Plant community dynamics, nutrient cycling, and multiple stable equilibria in peatlands. Seventh International Symposium on the Biogeochemistry of Wetlands, Duke University, Durham, North Carolina, June 17-20.
- Bridgham, Weltzin, Pastor, and **Chen**, The carbon balance of bogs and fens in a manipulative climate change experiment. The Seventh Symposium on Biogeochemistry of Wetlands, Duke University, Durham, North Carolina, June, 2001.
- Biophysical controls of water and carbon flows in three successional Douglas-fir stands using eddy-covariance method. Workshop on "Age-related change in structure and function of forests in the Pacific Northwest: a synthesis of research". Corvallis, Oregon, October 19, 2000.
- Gerdes, Buech, Palik, Gale, and **Chen**. The ecology of seasonal forest ponds. The Midwest Fish and Wildlife Conference. St. Paul, Minnesota, 2000.
- Scott Bridgham, Jason Keller, Jake Weltzin, John Pastor, Karen Updegraff, Brad Dewey, Cal Harth and **Jiquan Chen**, The carbon balance of bogs and fens in a manipulative climate change experiment. The Seventh Symposium on Biogeochemistry of Wetlands, Durham, North Carolina.
- **Jiquan Chen**, Eugenie Euskirchen, Tom Hayes, Siyan Ma, Treneice Marshall, and Sari Saunders, Are Edge effects more pronounced at edges? The 16<sup>th</sup> IALE Annual meeting, Phoenix, Arizona.
- Jaiteh, Malanding, S., Paul V. Desanker and **Jiquan Chen**, Land use and landscape patterns in the miombo. The 16<sup>th</sup> IALE Annual meeting, Phoenix, Arizona.
- Marshall, Treneice and **Jiquan Chen**, Contribution of wetland ecotones on vascular plant diversity within a northern hardwood landscape. The 16<sup>th</sup> IALE Annual meeting, Phoenix, Arizona.
- Eugénie Euskirchen, **Jiquan Chen**, Harbin Li, Eric Gustafson, Tom Crow, Modelling net carbon across a hypothetical landscape under alternative harvesting strategies. The 16<sup>th</sup> IALE Annual meeting, Phoenix, Arizona.
- **Chen**, Hubner, and Saunders, Plant distribution across Ozark landscape. Natural Areas Conference, St. Louis, Missouri, 2000.
- Bridgham, Scott D., John Pastor, **Jiquan Chen**, Jake Weltzin, Karen Updegraff, Cal Harth, Jason Keller, Brad Dewey, and Peter Weishampel, Peatland response to climate change - a manipulative approach.
- **Chen, Jiquan**, Kyaw Tha Paw U, Thomas H. Suchanek, Susan L. Ustin, Roger Shaw, Xinli Wang, Theodore C. Hsiao, Matthias Falk, Microclimate and energy balances of three Douglas-fir forests in southern Washington. The 24th Conference on Agricultural and Forest Meteorology, Davis, California.

- Paw U, Thomas H. Suchanek, Susan L. Ustin, **Jiquan Chen**, Theodore Hsiao, Roger Shaw, Thomas King, Matthias Falk, R. David Pyles and Anthony Matista, Micrometeorological estimates of carbon exchange in an old-growth forest. The 24th Conference on Agricultural and Forest Meteorology, Davis, California.
- Trevor Newton, Kyaw Tha Paw U, **Jiquan Chen**, Roger Shaw, Thomas King, Theodore C. Hsiao, Matthias Falk, R., David Pyles Anthony Matista, Amy Sundquist, young-San Park and Hibba Wabeh, The microclimate of a 65 m tall, old-growth coniferous forest.
- Ma, S., **J. Chen**, and M. North. Spatial relationships between forest canopies and microclimate and heat flows in a patchy mixed-conifer forest. The 24th Conference on Agricultural and Forest Meteorology, Davis, California.
- Euskirchen, E.S. and **Jiquan Chen**. Effects of edges on plant communities in the Chequamegon national forest, 3<sup>rd</sup> Annual Meeting of the Bayfield Landscapes. Ashland, Wisconsin, 2000.
- Euskirchen, E.S., **J. Chen**, and E.J. Gustafson. Soil respiration at dominant patch types within a managed landscape in northern Wisconsin. The 2000 ESA Annual Meeting, Snowbird, Utah, 2000.
- **Chen, J.**, S. Bridgham, J. Pastor, X.Wang, J. Weltzin, C. Harth, B. Dewey, J. Keller, and K. Updegraff. Energy flows in peatlands and their responses to heat and water loading. The 2000 ESA Annual Meeting, Snowbird, Utah, 2000.
- Mislivets\*, M., Sari C. Saunders, Dave C. Cleland, and **Jiquan Chen**, Landscape Structure Induced by Roads at different ecological levels in the Northern Great Lakes region, USA. The 2000 IALE Annual Meeting, Ft. Lauderdale, Florida, 2000.
- Ma, S, **J. Chen**, M. North, and M. Jurgensen, Soil respiration rate (SRR) among patches of a heterogeneous mixed-conifer forest in a Mediterranean climate. The 2000 ESA Annual Meeting, Snowbird, Utah, 2000.
- Fan, W., **J. Chen** and K.D. Brosofske. The scale dependency of the relationship between litter quantity and nitrogen mineralization in forest ecosystems and landscapes. The 2000 ESA Annual Meeting, Snowbird, Utah, 2000.
- Brosofske, K.D., **J.Chen**, and E.J. Gustafson, Modelling effects of broad-scale forest management on understory vegetation. The 2000 ESA Annual Meeting, Snowbird, Utah, 2000.
- Phillips, Bond, **Chen**, McDowell, Paw U, Ryan, Xinli, BI, Is forest transpiration a conservative hydrological process? A comparison of young and old growth forest water use. Annual Meeting, San Francisco, 1999.
- Bridgham, S. D., J. Pastor, **J. Chen**, J. Weltzin, X. Wang, K. Updegraff, C. Harth, P. Weishampel, and J. Keller, Climate change impacts on northern peatlands: a manipulative approach. Poster Presented at Conference Titled "How Nutrients Cycles Constrain Carbon Balances in Boreal Forests and Arctic Tundra," Organized on Behalf of GCTE (Global Change and Terrestrial Ecosystems) Core Project of the IGBP (International Geosphere Biosphere Program), Abisko, Sweden, 1999.
- **Chen, Jiquan**, Xinli Wang, Kyaw Tha Paw U, Tom Suchanek, Susan Ustin, Tom King, Ted Hsiao, Roger Shaw, and Matthias Falk. Net ecosystem exchanges of materials and energy of coniferous forests in the Pacific Northwest. Joint Science Team Meeting TCP, Per, and NIGEC, Indianapolis, Indiana, 1999.
- Bridgham S.D., J. Pastor, **J. Chen**, J. Weltzin, X. Wang, K. Updegraff, C. Harth, P. Weishampel, and J. Keller, Climate change impacts on northern peatlands: a manipulative approach. Poster Presented. Joint Science Team Meeting TCP, Per, and NIGEC, Indianapolis, Indiana, 1999.
- Brosofske, Saunders, **Chen**, Drummer, and Gustafson, Identifying scales of pattern in ecological data: a comparison of lacunarity, spectral, and wavelet analyses. IALE Meeting, Fort Collins, Colorado, 1999.
- Wang, X., **Jiquan Chen**, Scott Bridgham, Karen Updegraff<sup>2</sup>, and John Pastor. Responses of radiation balance and temperatures to increased infrared loading in northern peatland ecosystems (oral).
- Paw U, K.T., **J. Chen**, S. Ustin, T.Suchanek, X. Wang, T. King, M. Falk, T. Hsiao and R. Shaw Carbon and water flux of Douglas-fir forests in southern Washington (Chen as oral presenter).
- Fan, W., **J. Chen**, K.D. Brosofske, and D.Zheng, Landscape-level effects of alternative forest management on nitrogen mineralization in the Chequamegon National forest, Wisconsin (oral).
- **Chen J.** CO<sub>2</sub> and H<sub>2</sub>O fluxes of an old growth and young stand. Research Priorities for Future MOFEP, MOFEP

Annual Meeting, Wind River, WESTGEC/NIGEC, Jefferson City, Missouri, 1998.

- **Chen J.** Alternative management at landscape scales. Bad River Watershed Management conference, Wisconsin, 1998.
- **Chen, J.** CO<sub>2</sub> and H<sub>2</sub>O fluxes using a mobile eddy-flux system. WESTGEC/NIGEC Meeting, Wind River, 1998.
- **Chen, J.** and K. Brosofske. Spatial relationship between canopies and understory vegetation in an old-growth spruce-fir forest. Annual Meeting, Ecological Society of America, Albuquerque, New Mexico, 1997.
- Rudnicki, M. and **J. Chen**. Spatial and temporal variation of radial growth rates in an old-growth Douglas-fir forest. Annual Meeting, Ecological Society of America, Albuquerque, New Mexico, 1997.
- Saunders, S. K. Brosofske, **J. Chen**, and T. Crow. Hierarchical relationships between landscape structure and temperature in a managed forest landscape. Annual Meeting, Ecological Society of America, Albuquerque, New Mexico, 1997.
- Song, B., **J. Chen**, M. Rudnicki. The relationship between canopy structure and the pattern and process of the understory. Annual Meeting, Ecological Society of America, Albuquerque, New Mexico, 1997.
- **Chen, J.**, M. Xu, and A. Mclean. Predicting air and temperatures in a forested landscape using Landsat TM thermal data and ground measurements. Annual Meeting, Ecological Society of America, Albuquerque, New Mexico, 1997.
- Brosofske, **Chen**, Crow, and Saunders. Plant diversity at multiple scales across a northern Wisconsin pine barrens landscape 1997 annual meeting. Ecological Society of America, Albuquerque, New Mexico, 1997.
- Site characteristics of wind river canopy crane facilities. AmeriFlux Network Workshop, St. Louis, Missouri, 1996.
- Quantifying 3-d canopies: a modeling approach. 2nd Open House Meeting at Wind River Canopy Crane Site. Wind River, Washington, 1996.
- Silbernagel, **Chen**, Gale, and Crow, Dealing with multi-scale data sets in documenting landscape structure changes. IUFRO Landscape Ecology Workshop, 1996.
- Saunders, **Chen** and Crow, The nature of variation in the relationship between abiotic and biotic landscape characteristics within and among structural patch type. IUFRO Landscape Ecology Workshop, 1996.
- Song, Rudnicki, and **Chen**, Examining the relationship of overstory structure to understory microclimate and vegetation. IUFRO Landscape Ecology Workshop. 1996.
- **Chen**, Crow Brosofske, Saunders, and Xu. Microclimatic Perspectives in forest ecosystems and landscapes. IUFRO Landscape Ecology Workshop, 1996.
- Saunders, Song, Reed, and **Chen**, Spatial and temporal relationships in growth characteristics of northern hardwood forests. Modeling longitudinal and spatial correlated data: methods, applications, and future directions. Nantucket, MA. 1996.
- Chen, Brosofske, Naiman, and Franklin, Vegetation characteristics across streams in western Washington. The 80th Annual Meeting of the ESA, Snowbird, Utah, 1995.
- Song, **Chen**, Bradshaw, Reed, and Franklin, A hierarchical approach for modelling canopy structures and heterogeneity: from crowns to canopy. The 80<sup>th</sup> Annual Meeting of the ESA, Snowbird, Utah 1995.
- Saunders, **Chen**, Brosofske, and Crow, Predicting spatial and temporal pattern of microclimate in managed forest landscape. Tenth Annual U.S. Landscape Ecology Symposium, 1995.
- Silbernagel, **Chen**, Gale, Martin, Pregitzer, and Probst. Patterns of settlement related to landscape ecosystems in the eastern Upper Peninsula of Michigan. Tenth Annual U.S. Landscape Ecology Symposium, 1995.
- **Chen, J.** Ecological characteristics across multiple spatial and temporal scales. Deans' Tour, Ashland, Wisconsin, 1995.
- **Chen** and Brosofske. Changes in microclimate from streams to uplands in managed landscapes understanding microclimate in ecosystem management. The Ecosystem Management Strategies for the Lake Superior Region --



a Conference and Workshop Applicable to the Great Lakes Region, Duluth, Minnesota, 1994.

- **Chen, Naiman, and Franklin.** Influences of riparian buffers on microclimatic gradients across stream ecosystems. The 9th Annual U.S. Landscape Ecology Symposium, Tucson, Arizona, 1994.
- **Chen, Naiman, and Franklin.** Microclimate across riparian ecotone. The International Workshop on Ecotone, Seattle, Washington, 1994.
- **Chen, J.** Patterns and scales of biotic and abiotic variables across forested ecosystems/landscapes. An Ecolunch Seminar, Houghton, Michigan, 1994.
- **Chen, J.** The importance of edges in understanding ecosystem interactions and landscape mosaics. 1993), ESA Symposium, Organized by Jiquan Chen and Gay Bradshaw, 78th Annual Meeting of the ESA, Madison, Wisconsin, 1993.
- **Chen, J.** Natural and anthropogenic edges in forest landscape and their influences on ecological processes. The 78th Annual Meeting of the ESA, Madison, Wisconsin, 1993.
- **Chen, J.** Non-growing season temperature and moisture gradients from a south-facing edge into the old-growth Douglas-fir forest. 78th Annual Meeting of the ESA, Madison, Wisconsin, 1993.
- **Chen, J.** Edge effects on understory frequency, cover, and flowering in an old-growth Douglas-fir forest in southwestern Washington. 78th Annual Meeting of the ESA, Madison, Wisconsin, 1993.
- **Chen, J.** Emerging concepts of landscape ecology and management. Invited Lecture for the School of Forestry and Wood Products, Michigan Technological University, Houghton, Michigan, 1993.
- **Chen, J.** Forest edges and edge effects: from stands to landscapes. Invited Speaker for a Seminar in the School of Forestry and Wood Products at the Michigan Technological University, Houghton, Michigan, 1993.
- **Chen, J.** Spatial characteristics of an old-growth spruce-fir forest. The 8th U.S. Landscape Ecology Symposium. Oak Ridge, Tennessee, 1993.
- **Chen, J.** Microclimate and forest vegetation features across riparian buffers. CSS and ONRC "Opportunities and Frontiers in Watershed Management" Presentations. 1992.
- **Chen, J.** Microclimatic pattern and its variability in the interior old-growth Douglas-fir forest. The 77th Annual ESA Meeting. Honolulu, Hawaii, 1992.
- **Chen, J.** Defining landscape patterns of biotic and abiotic variables. The 6th Annual Meeting of the Society for Conservation Biology. Blacksburg, Virginia, 1992.
- **Chen, J.** Integrating edge effects into a landscape perspective -- a simulation approach. The 7th U.S. Landscape Ecology Symposium. Corvallis, Oregon, 1992.
- **Chen, J.** Managing forest edges to improve habitat conditions. The 7th U.S. Landscape Ecology Symposium. Corvallis, Oregon. 1992.
- **Chen, J.** An empirical for diurnal air temperature pattern from clear-cut edge into the old-growth Douglas-fir forest. The 7th U.S. Landscape Ecology Symposium. Corvallis, Oregon, 1992.

#### **RESEARCH GRANTS (\$17,063,653; 1 through 70)**

1. New Forestry Microclimate and Vegetation Responses (**Chen** and Franklin), USDA Forest Service, Pacific Northwest Experimental Station, 1/1992-6/1993, **\$50,000**.
2. Microclimatic Pattern within Riparian Systems (**Chen, Naiman, and Franklin**), USDA Forest Service, Pacific Northwest Experimental Station, Water-land Interaction Program, 1/1993-12/1995, **\$20,000**.
3. Microclimate Associated with Alternative Systems (**Chen, Naiman, Franklin, and Harris**) Water-land Interactions (PNW), 1/1993 -12/1994, and **\$14,130**.
4. Microclimate and Alternative Silviculture (**Chen** and Franklin), USDA Forest Service, Pacific Northwest Experimental Station, 9/1993-12/1995, \$30,000 + OH = **\$44,100**.
5. Relating Microclimate, Vegetation, and Decomposition to Landscape Patterns on the Chequamegon National Forest, Wisconsin (**Chen** and Crow), USDAFS NC Station and Graduate School Training Fellowship, 4/1/1994 - 6/30/1998, \$150,470 + OH = **\$221,191**.
6. Growing Season Microclimate and Vegetation Responses Across an Oak Forest Landscape of Southeast Missouri

- Ozarks, U.S.A. (**Chen** and Brookshire), Missouri Department of Conservation, 8/1994-5/1998, \$130,000 + OH = **\$191,100**.
7. Development of an Empirical Model to Predict Temperature and Moisture Gradients Across Managed Stream Ecosystems (**Chen**, Naiman, Franklin, and Harris) Water-land Interactions (PNW), 6/1/1994-12/31/1995, \$10,000 + OH = **\$14,200**.
  8. Canopy Structure and Microclimate: Description, Modeling, and Responses (**Chen**, Bradshaw, and Franklin). USDA Forest Service, Pacific Northwest Experimental Station, New Perspectives Program, 6/1/1994-5/31/1998, \$42,000 + OH = **\$61,740**.
  9. Sustainable Development of Forested Wetlands: Michigan Tech's Program on the Structure and Function of Wetland Ecosystems (Mroz, **Chen**, Gale, Jurgensen, and Reed). Research Excellent Funds. 1/1/1995 - 12/31/1997, \$234,000, Mead Paper, Publishing Division, \$15,000/yr since 1995, total = **\$279,000**.
  10. Sustainable Management of Forest Landscapes: the Two-hearted Watershed (Pregitzer, MaClean, **Chen**, and Reed), The Nature Conservancy, Michigan Chapter, 4/1995-12/1995, **\$2,000**.
  11. Wetland Research (Mroz, Reed, **Chen**, and Jurgensen), Mead Paper, 8/1/1995-7/30/1996, **\$15,000**.
  12. Earthwatch, Characterizing the 3-dimensional Structure of Spruce-fir Forest Canopies at the Changbaishan Natural Reserve (CNR) (**Chen**), 6/1-12/31/1996, **\$16,000**.
  13. Micronet Equipment for teaching C<sup>2</sup>E<sup>2</sup> Equipment Funds (**Chen**), MTU, May 1995, **\$3,500**.
  14. A Symposium for "Current and Emerging Ecological and Environmental Issues in Asia" at 81st Annual Meeting in Providence, Rd (**Chen**, MTU, and Boyle), Ecological Society of America, 1996, **\$1,500**.
  15. Monitoring Forest Microclimate and Forest-atmosphere Exchange of Co<sub>2</sub> and H<sub>2</sub>O at the Wind River Canopy Crane Site in a Douglas-fir Forest (**Chen**, Paw, and Ustin), USDA Forest Service, 6/20/1996-12/31/1997, \$19,000 + OH = **\$27,930**.
  16. Monitoring Sensible Heats, Co<sub>2</sub>, and H<sub>2</sub>O at the Wind River Canopy Crane Site (Paw U, **Chen**, and Ustin). WESTGEC/NIGEC, 1996-1997, **\$234,541**.
  17. Integrated Ecosystem Research at the Wind River Canopy Crane Facilities, Carson, Washington (**Chen**, Shaw, and Rudnicki). Earthwatch and Durfee Foundation, 1997, **\$8,850**.
  18. Microclimate and its Relationship to Soil Processes in Teakettle Experimental Forest (**Chen** and Jurgensen), USDA Forest Service PSW Station, 4/1998 - 3/2001, \$89,454 + OH = **\$131,497**.
  19. Integrating Ecological, Economic, and Social Concerns in a Common Landscape (**Chen**, Halvorsen, Pickens, Mroz, Jurgensen, and Pilant), Research Excellence Fund of Michigan State, \$136,000 12/1/1997 - 11/30/2000, \$35,956 supplement funds for 2001, total **\$171,956**.
  20. CO<sub>2</sub> and H<sub>2</sub>O Fluxes of Managed Forests in Responding to Global Climate Change (**Chen**), WESTGEC/NIGEC/DOE, 7/1/1997- 6/30/2000 \$150,000 + others = **\$450,000**.
  21. Ecological Synthesis of the Chequamegon National Forest Landscape Project (Saunders and **Chen**), USDAFS NC Station, 12/21/1998 - 8/21/1999, \$25,320 + OH = **\$37,220**.
  22. Collaborative research on below ground ecosystem function (Pregitzer, **Chen**, et al.), DISPRO of EPA, 83 6/1/1998 - 5/31/2001, \$699,783 + others = **\$1,400,000**.
  23. Species Distribution Across Ozark Landscape (**Chen** and Zheng), Missouri Department of Conservation, 7/1/1998-6/30/1999 \$10,000+ OH = **\$14,700**.
  24. Applications of remote sensing data in landscape analysis (**Chen**), RSI of the Research Excellence Fund of Michigan State, 1997/1998 \$2,903, 1998/1999 \$23,000, total **\$25,903**.
  25. Integrated ecosystem studies at the Wind River Canopy Crane Site (**Chen**, Shaw, and Harmon), Earthwatch and Durfee Foundation, 1998, \$9,600 + OH = **\$14,112**.
  26. Carbons and Energy Flow and Plant Community Response to Climate Change in Peatlands (**Chen**), National Science Foundations (NSF), 8/1997 - 7/2001, **\$1,200,450**.
  27. Adaptive Landscape Management: Hypothesis, Options, Returns (**Chen** and Desanker), USDA National Res. Initiative (NRI), 9/1997 - 8/2000, **\$228,000**.
  28. Designing Regeneration Systems for Sustainable Management of Lake States Forest Wetlands (Mroz, Reed, **Chen**, Jurgensen), USDA National Res. Initiative (NRI), 10/1997-9/2000, **\$181,357**.
  29. Ecosystem Responses to Disturbances in Teakettle Experimental Forest (**Chen** and Jurgensen), McIntire-Stennis Funds, 9/1/1998 - 8/30/2000, **\$28,000**.
  30. Determine the Impacts to the Natural Fire Regime Due to Moose Browsing at Isle Royal National Park, Michigan (Oelfke, Peterson, **Chen**, and Jurgensen), National Park Service, 7/200 - 6/2002, **\$220,581**.
  31. Physical and Vegetation Responses to Stand and Landscape Structure: a Synthesis (**Chen** and Zheng), Missouri Department of Conservation, 7/199 -6/30/2000, \$121,000 + OH = **\$177,870**.
  32. Ecological Synthesis of the Chequamegon National Forest Landscape Project (Saunders and **Chen**), USDA FS

- NC Station, 01/27/1999-06/30/1999, \$25,320 + OH = **\$37,220**.
33. Sustainability and Management of Ecosystems and Landscape in the Great Lakes Region: Transferring Science to Natural Resource Management. (Saunders and **Chen**), USDA FS NC Station, 8/28/1999 to 8/15/2001, \$118,772. + OH = **\$174,595**.
  34. Temporal and Spatial Patterns of Soil Respiration and microclimate and Their Relationships to Disturbances in Teakettle Experimental Forest (**Chen**, Jurgensen, Ma), 4/1/2000 - 3/30/2001, \$30,000 + OH = **\$44,100**.
  35. Biocomplexity-incubation Activity on Biocomplexity in Peatlands (Bridgham, Pastor, Roulet, Frolking, **Chen**, and Weltzin), National Science Foundation, 10/1/2000 - 9/30/2002, **\$99,500**.
  36. Carbon Sequestering in Managed Forest Landscapes: Application of Mobile Flux Measurement Lab (**Chen** and Euskirchen), USDA Forest Service NC Station, 10/1/2000 - 9/30/2001, \$30,000 + OH = **\$44,100**.
  37. Micrometeorological equipment for cross-campus atmospheric science research and teaching (Judith Perlinger, **Jiquan Chen**, and Will Cantrell), C<sup>2</sup>E<sup>2</sup> Grant, 11/30/2000, **\$11,715**.
  38. Adaptive landscape management: a synthesis from the Chequamegon National Forest (**Chen**). Michigan's Research Excellent Funds, 2/1/2001- 1/31/2002, **\$35,956**.
  39. Projecting changes in carbon stores related to management and forest succession in a regional forest. **J. Chen**, The Northern Global Climate Change Program and USDA FS NC Station, about \$70000 + OV = **\$99,400**.
  40. Carbon exchange and cumulative NEP of disturbed land mosaics (**Chen** and Brosfokske). National Science Foundation. 9/1/2001 - 8/31/2004, \$553,970 + \$114,521 = **\$668,491**.
  41. Development of spatially-explicit decision tool for fire management at landscape levels. **Chen**, Saunders, Song, Crow, Cleland, and North. The Joint Fire Science Program, 10/1/2001 - 9/30/2004, \$618,742 + \$379,309 = **\$998,051**.
  42. Carbon flux and storage in mixed oak forests of the Ozark landscape. **Chen** and Moorhead, 7/2002 - 6/2006, (\$119,122 + \$99,157 = \$218,279) + (\$41,565 + \$38,087 = \$79,652) = **\$297,931**.
  43. REU Supplement 0218097 in 2001/2002, **Chen** and Brosfokske, National Science Foundation, **\$6,000**.
  44. Kohler international travel funds, UT, **Chen**, **\$1,000**.
  45. Global Warming Has Potential To Cool The Temperate Soils. **Chen**, Summer research award and fellowships program, University of Toledo, **\$5,000**.
  46. Development of Spatial Database within a GIS Platform for Environmental Education and Research (Goldman, **Chen** and Stutzenstein). UAC, **\$4,308**.
  47. Aboveground biomass estimation using satellite remote sensing in Missouri Ozark Forest: calibration with Russian scientist. (**Chen** and Zheng, 4/1- 8/30/2003, USDA Forest Service Southern Station, \$4260 = **\$11,899**.
  48. Coupling the effects of management and climate on carbon and water fluxes in the forests of eastern U.S. and P.R.C. (**Chen**, Noormets, Sun, Mickler), Southern Global Climate Change Program, (\$267,595 + \$94,607 = **\$362,202**, 9/1/2003 - 5/31/2004).
  49. **Chen, J.** and A. Noormets. Coupling the effects of management and climate on carbon and water fluxes in the forests of eastern U.S. and P.R.C. Southern Global Change Program and the OBOR Action Fund  
**Year 1:** \$251,610 + \$180,000 + \$241,075 = **\$672,685**  
**Year 2:** \$165,252+\$110,587 = **\$275,839**  
**Year 3:** **\$100,068**
  50. **Chen, J.** Research expertise catalog of biological programs. National Park Service and CESU. 14.5 Months, (\$20,000 + \$6,654 = \$26,654) + (\$10,000 + \$2,254 = \$12,254) = **\$38,908** (6/15/2004 - 9/30/2006).
  51. **Chen, J.** Simulating Fire Spread in Eastern Forest Landscapes. Northern Global Change Program, \$25,000+\$8,854=**\$33,854**, (07/2002/2004 - 12/31/2005).
  52. **Chen, J.**, H. Gottgens, and 12 others. Team building and training of a nationally competitive research group at the University of Toledo to participate in the NSF-NEON. University Toledo, **\$30,000**.
  53. **Chen, J. S.** McNulty, A. Noormets, G. Sun, G. Lin, and Y. Wang. Effects of Land Use Change on the Energy and Water Balance of the Semi-Arid Region of Inner Mongolia, China. NASA \$571,837 + \$142,606 = **\$714,443** (9/1/2005 - 8/30/2008, submitted 12/17/2004).
  54. **Chen, J.** Advance ecological lecture series, Fudan University, **\$281,000** (RMB 2,250,000), 5/2004 - 4/2007).
  55. **Chen, J.** Talent Oversea Ecology team. **\$125,000** (RMB 1,000,000), Institute of Botany, Chinese Academy of Sciences, 1/2005 - 12/2007.
  56. **Chen, J.** Bridging environmental education and research with institutions in P.R. China. The Kohler International Travel Funds, UT, **\$400**, (submitted November 8, 2005).
  57. Moorhead, Stepien, **Chen**, and others. Integrating environmental and public health of urban ecosystems. Program for Academic Excellence (PAE), UT. **\$15,000** (submitted 9/2006).
  58. **Chen, J.** Carbon Flux and Storage in Mixed Oak Forests of MOFEP. (7/1/2007 - 6/30/2011), **\$145,321**, Missouri

Dept of Conservation.

59. **Chen, J.** Landscape Ecology and Forest Management: Challenges and Solutions. USDA Forest Service, \$20,000+\$16,641 = **\$36,641**.
60. Chen, J. Coupled effects of climate and land use on ecosystem carbon and water cycles. Southern Global Change Program, **\$100,016**, 6/1/2007 - 5/31/2008.
61. Chen, J. Support for the IUFRO Landscape Ecology Conference. The Northern Global Change Program, **\$4,875**, 2008.
62. Moorehead, D., C. Stepein, **J. Chen**, A. Sponberg, P. Lindquist, K. Czajkowski. Integrating Environmental and Public Health of Urban Ecosystems Date: 2 March 2007 Principle. UT's Program for Excellence. **\$50,000** (submitted 3/2/2007).
63. **Chen, J.** Landscape Ecology and Forest Management: Challenges and Solutions. NASA-LCLUC, 3/1/2008 - 12/31/2008, **\$20,000**.
64. **Chen, J.** Biophysical Constraints and Resource Use Limitations for Maximizing Biofuel Production. GLBRC-DOE, \$125,277 + \$20,000 = **\$145,277**. 12/1/2008 – 11/30/2009.
65. **Chen, J.** Interactive Changes of Ecosystems and Societies on the Mongolian Plateau: From Coupled Regulations of Land Use and Changing Climate to Adaptation. NASA\_LULCC. **\$629,474**, 5/1/2009 - 4/30/2010.
66. **Chen, J.** Diagnose the Coupled Effects of Climate and Landuse on Regional CO<sub>2</sub>, H<sub>2</sub>O and Energy. Chinese Natural Science Foundation, submitted on 3/12/2009, Y1, **\$200,000**.
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2. Gelfant, Robertson, Chen et al. Study of effect of land-use on soil N<sub>2</sub>O emissions using ecosystem level measurements with an open-path N<sub>2</sub>O analyzer and static chamber methods. APRI/USDA pre-proposal (submitted 11/14/12)
3. **Chen**, Jones, John, Zhang, and Kinnucan. Ecosystems and Societies of Outer and Inner Mongolia: Divergent Trajectories and Coevolution. CNH/NSF, \$1,496,056 (5/1/13 – 4/40/18) (submitted 11/20/12)
4. **Chen, J.** D. Brown. Ecosystems and Societies on Double-Headed Mongolian Plateau. LCLUC/NASA. Preproposal due on 12/1/12.